SIGMA WATERWORKS

C110 DUCTILE IRON
FLANGED FITTINGS



C110 DUCTILE IRON FLANGED FITTINGS BASIC SPECIFICATIONS

SIZES:
- 2" - 64"

MATERIAL:
- Ductile Iron ASTM A536 Grade 60-42-10, 65-45-12 or 70-50-05.

PRESSURE:
- 250 PSI Water Working Pressure for Ductile Iron sizes 2" - 48".
- 150 PSI Water Working Pressure for Ductile Iron sizes 54" - 64".

TESTING:
- In accordance with ANSI / AWWA C110 / A21.10 where applicable.
- Other items are in accordance with manufacturer's standards.
- 54" and above Flanged Fittings are manufactured as per AWWA C153/A21.53.
- All fittings are hydrostatically tested in accordance with SIGMA Quality Management Standard.
- All fittings are heat coded to ensure traceability and verification of metallurgical properties in accordance with SIGMA Quality Management Standards.

LAYING LENGTH:
- In accordance with ANSI / AWWA C110 / A21.10 where applicable.
- Other items are in accordance with manufacturer's standards.
- 54" and above Flanged Fittings are manufactured as per AWWA C153/A21.53.

CEMENT LINING:
- Double cement lined in accordance with ANSI/AWWA C104 / A21.4.

COATING:
- Interior of fitting is seal coated (asphalt material) in accordance with ANSI / AWWA C104/A21.4 and NSF61 approved.
- Red Primer Outside.
- For special conditions, other types of coatings and linings are available.
- Please specify when ordering.

GASKETS:
- SBR in accordance with ANSI/AWWA C111/A21.11.
- Also available in EPDM, NBR and CR.

APPROVALS:
- 2"-16" Underwriters Laboratories listed and Factory Mutual Approved.

STANDARDS:
- Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372.
- ANSI / AWWA C110 / A21.10 Where applicable.
- Other items are in accordance with manufacturer's standards.
- 54" and above Flanged Fittings are manufactured as per AWWA C153/A21.53.

INSTALLATION:
- Per ANSI/AWWA C600 and C111 using DIP conforming to C150/C151 and PVC pipe conforming to C900/C905 and C909.

NSF Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372 · UL LISTED · FM APPROVED · AWWA MEMBER

SIGMA WATERWORKS
700 Goldman Drive
Cream Ridge, NJ 08514
800 999 2550 p
www.sigmawaterworks.com

SIGMA WATERWORKS

C110 DUCTILE IRON
FLANGED FITTINGS

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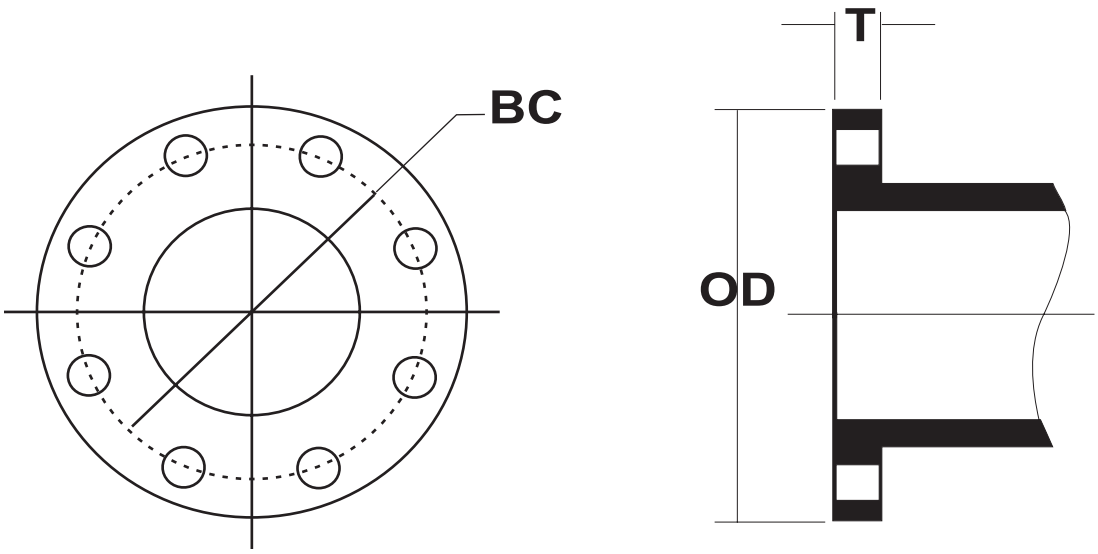
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Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

NSF Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372
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AWWA MEMBER

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C110 DUCTILE IRON FLANGED FITTINGS



Size	OD	BC	T	Hole Dia.	Bolt Size	No. Bolts
2	6.00	4.75	0.62	0.75	5/8 x 2 1/2	4
3	7.50	6.00	0.75	0.75	5/8 x 2 1/2	4
4	9.00	7.50	0.94	0.75	5/8 x 3	8
5	10.00	8.50	0.94	0.88	3/4 x 3	8
6	11.00	9.50	1.00	0.88	3/4 x 3 1/2	8
8	13.50	11.75	1.12	0.88	3/4 x 3 1/2	8
10	16.00	14.25	1.19	1.00	7/8 x 4	12
12	19.00	17.00	1.25	1.00	7/8 x 4	12
14	21.00	18.75	1.38	1.12	1 x 4 1/2	12
16	23.50	21.25	1.44	1.12	1 x 4 1/2	16
18	25.00	22.75	1.56	1.25	1 1/8 x 5	16
20	27.50	25.00	1.69	1.25	1 1/8 x 5	20
24	32.00	29.50	1.88	1.37	1 1/4 x 5 1/2	20
30	38.75	36.00	2.12	1.37	1 1/4 x 6 1/2	28
36	46.00	42.75	2.38	1.62	1 1/2 x 7	32
42	53.00	49.50	2.62	1.62	1 1/2 x 7 1/2	36
48	59.50	56.00	2.75	1.62	1 1/2 x 8	44
54	66.25	62.75	3.00	2.00	1 3/4 x 8 1/2	44
60	73.00	69.25	3.12	2.00	1 3/4 x 9	52
64*	80.00	76.00	3.38	2.00	1 3/4 x 9	52

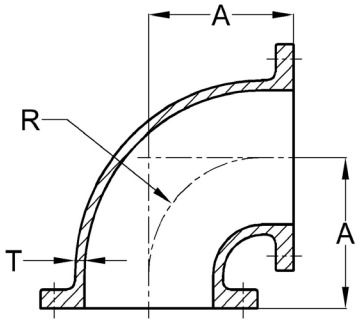
** Contact SIGMA Waterworks for available fittings.*

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372

BENDS, 1/4 90°

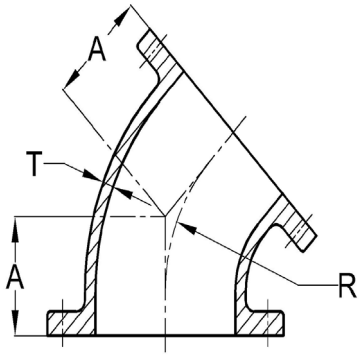
Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	R	T
2	16	CFB290	DFB290	4.50	3.00	0.31
2.5			DFB2.590	5.00	3.50	0.31
3	25	CFB390	DFB390	5.50	4.00	0.48
4	45	CFB490	DFB490	6.50	4.50	0.52
5	52	CFB590	DFB590	7.50	5.50	0.52
6	65	CFB690	DFB690	8.00	6.00	0.55
8	105	CFB890	DFB890	9.00	7.00	0.60
10	165	CFB1090	DFB1090	11.00	9.00	0.68
12	235	CFB1290	DFB1290	12.00	10.00	0.75
14	290	CFB1490	DFB1490	14.00	11.50	0.66
16	370	CFB1690	DFB1690	15.00	12.50	0.70
18	450	CFB1890	DFB1890	16.50	14.00	0.75
20	580	CFB2090	DFB2090	18.00	15.50	0.80
24	900	CFB2490	DFB2490	22.00	18.50	0.89
30	1,430	CFB3090	DFB3090	25.00	21.50	1.03
36	2,135	CFB3690	DFB3690	28.00	24.50	1.15
42	3,055	CFB4290	DFB4290	31.00	27.50	1.28
48	4,095	CFB4890	DFB4890	34.00	30.50	1.42
54	3,740	CFB5490	DFB5490	39.00	33.50	0.90
60	4,965	CFB6090	DFB6090	43.00	36.50	0.94



FLXFL Bend 90°

BENDS, 1/8 45°

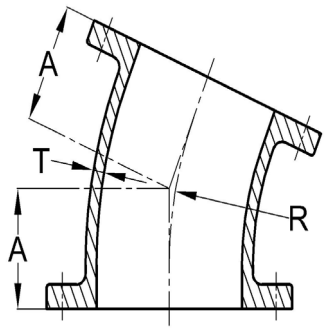
Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	R	T
2	12	CFB245	DFB245	2.50	2.41	0.31
2.5		CFB2545	DFB2545	3.00	3.62	0.48
3	20	CFB345	DFB345	3.00	3.62	0.48
4	40	CFB445	DFB445	4.00	4.81	0.52
5	45	CFB545	DFB545	4.50	6.04	0.52
6	55	CFB645	DFB645	5.00	7.25	0.55
8	90	CFB845	DFB845	5.50	8.44	0.60
10	130	CFB1045	DFB1045	6.50	10.88	0.68
12	195	CFB1245	DFB1245	7.50	13.25	0.75
14	220	CFB1445	DFB1445	7.50	12.06	0.66
16	280	CFB1645	DFB1645	8.00	13.25	0.70
18	325	CFB1845	DFB1845	8.50	14.50	0.75
20	430	CFB2045	DFB2045	9.50	16.88	0.80
24	630	CFB2445	DFB2445	11.00	18.12	0.89
30	1,120	CFB3045	DFB3045	15.00	27.75	1.03
36	1,755	CFB3645	DFB3645	18.00	35.00	1.15
42	2,600	CFB4245	DFB4245	21.00	42.25	1.28
48	3,580	CFB4845	DFB4845	24.00	49.50	1.42
54	2,735	CFB5445	DFB5445	20.50	55.68	0.90



FLXFL Bend 45°

BENDS, 1/16 22-1/2°

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	R	T
2	12	CFB222	DFB222	2.50	6.04	0.31
3	20	CFB322	DFB322	3.00	7.56	0.48
4	40	CFB422	DFB422	4.00	10.06	0.52
5	45	CFB522	DFB522	4.50	10.86	0.52
6	55	CFB622	DFB622	5.00	15.06	0.55
8	90	CFB822	DFB822	5.50	17.62	0.60
10	135	CFB1022	DFB1022	6.50	22.62	0.68
12	205	CFB1222	DFB1222	7.50	27.62	0.75
14	225	CFB1422	DFB1422	7.50	25.12	0.66
16	285	CFB1622	DFB1622	8.00	27.62	0.70
18	335	CFB1822	DFB1822	8.50	30.19	0.75
20	435	CFB2022	DFB2022	9.50	35.19	0.80
24	640	CFB2422	DFB2422	11.00	37.69	0.89
30	1,135	CFB3022	DFB3022	15.00	57.81	1.03
36	1,790	CFB3622	DFB3622	18.00	72.88	1.15
42	2,665	CFB4222	DFB4222	21.00	88.00	1.28
48	3,665	CFB4822	DFB4822	24.00	103.06	1.42
54	2,260	CFB5422	DFB5422	14.00	50.00	0.90
60	2,985	CFB6022	DFB6022	14.00	48.50	0.94

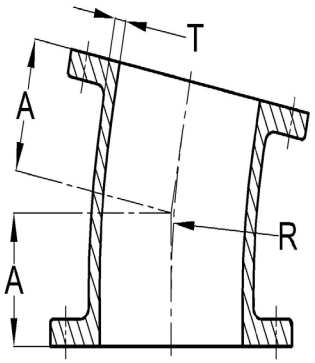


FLXFL Bend 22-1/2°

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

BENDS, 1/32 11-1/4°

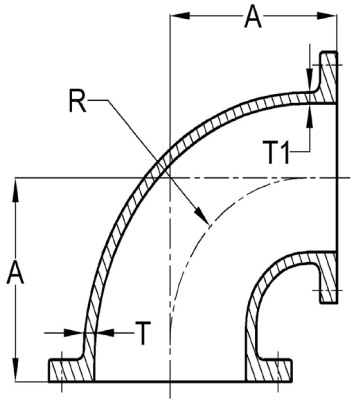
Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	R	T
2	12	CFB211	DFB211	2.5	12.69	0.31
3	20	CFB311	DFB311	3.0	15.25	0.48
4	40	CFB411	DFB411	4.0	20.31	0.52
5	45	CFB511	DFB511	4.5	22.85	0.52
6	55	CFB611	DFB611	5.0	30.5	0.55
8	90	CFB811	DFB811	5.5	35.5	0.60
10	135	CFB1011	DFB1011	6.5	45.69	0.68
12	205	CFB1211	DFB1211	7.5	55.81	0.75
14	225	CFB1411	DFB1411	7.5	50.75	0.66
16	285	CFB1611	DFB1611	8.0	55.81	0.70
18	335	CFB1811	DFB1811	8.5	60.94	0.75
20	435	CFB2011	DFB2011	9.5	71.06	0.80
24	645	CFB2411	DFB2411	11.0	76.12	0.89
30	1,150	CFB3011	DFB3011	15.0	116.75	1.03
36	1,805	CFB3611	DFB3611	18.0	147.25	1.15
42	2,680	CFB4211	DFB4211	21.0	177.69	1.28
48	3,695	CFB4811	DFB4811	24.0	208.12	1.42
54	2,100	CFB5411	DFB5411	12.0	60.00	0.90
60	2,665	CFB6011	DFB6011	10.5	62.41	0.94



FLXFL Bend 11-1/4°

REDUCING 90° BENDS

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	R	T	T1
3 x 2	22	CFB32	DFB32	5.60	4.00	0.48	0.31
3 x 2.5			DFB325	5.50	4.00	0.48	0.31
4 x 2			DFB42	6.50	4.50	0.52	0.31
4 x 3	29	CFB43	DFB43	6.50	4.50	0.52	0.48
6 x 3	56	CFB63	DFB63	8.00	6.00	0.55	0.48
6 x 4	55	CFB64	DFB64	8.00	6.00	0.55	0.52
6 x 5	65	CFB65	DFB65	8.00	6.00	0.55	0.52
8 x 4	75	CFB84	DFB84	9.00	7.00	0.60	0.52
8 x 5	80	CFB85	DFB85	9.00	7.00	0.60	0.52
8 x 6	85	CFB86	DFB86	9.00	7.00	0.60	0.55
10 x 4	130	CFB104	DFB104	11.00	9.00	0.68	0.52
10 x 6	135	CFB106	DFB106	11.00	9.00	0.68	0.55
10 x 8	150	CFB108	DFB108	11.00	9.00	0.68	0.60
12 x 4	140	CFB124	DFB124	12.00	10.00	0.75	0.52
12 x 6	160	CFB126	DFB126	12.00	10.00	0.75	0.55
12 x 8	180	CFB128	DFB128	12.00	10.00	0.75	0.60
12 x 10	200	CFB1210	DFB1210	12.00	10.00	0.75	0.68
14 x 6	144	CFB146	DFB146	14.00	11.50	0.66	0.55
14 x 8	215	CFB148	DFB148	14.00	11.50	0.66	0.60
14 x 10	240	CFB1410	DFB1410	14.00	11.50	0.66	0.68
14 x 12	270	CFB1412	DFB1412	14.00	11.50	0.66	0.75
16 x 6	220	CFB166	DFB166	15.00	12.50	0.70	0.55
16 x 8	240	CFB168	DFB168	15.00	12.50	0.70	0.60
16 x 10	280	CFB1610	DFB1610	15.00	12.50	0.70	0.68
16 x 12	310	CFB1612	DFB1612	15.00	12.50	0.70	0.75
16 x 14	335	CFB1614	DFB1614	15.00	12.50	0.70	0.66
18 x 6	260	CFB186	DFB186	16.50	14.00	0.75	0.55
18 x 8	330	CFB188	DFB188	16.50	14.00	0.75	0.60
18 x 10	330	CFB1810	DFB1810	16.50	14.00	0.75	0.68
18 x 12	350	CFB1812	DFB1812	16.50	14.00	0.75	0.75
18 x 14	385	CFB1814	DFB1814	16.50	14.00	0.75	0.66
18 x 16	420	CFB1816	DFB1816	16.50	14.00	0.75	0.70
20 x 6	320	CFB206	DFB206	18.00	15.50	0.80	0.55
20 x 8	345	CFB208	DFB208	18.00	15.50	0.80	0.60
20 x 10	445	CFB2010	DFB2010	18.00	15.50	0.80	0.68
20 x 12	415	CFB2012	DFB2012	18.00	15.50	0.80	0.75
20 x 14	455	CFB2014	DFB2014	18.00	15.50	0.80	0.66
20 x 16	495	CFB2016	DFB2016	18.00	15.50	0.80	0.70
20 x 18	525	CFB2018	DFB2018	18.00	15.50	0.80	0.75



Reducing Bend 90°

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

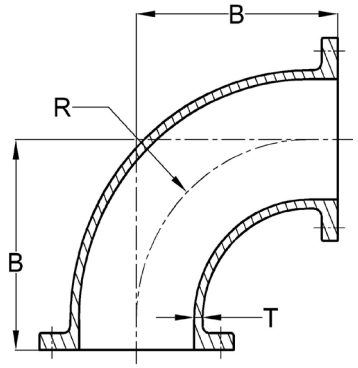
REDUCING 90° BENDS (continued)

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	R	T	T1
24 x 6	480	CFB246	DFB246	22.00	18.50	0.89	0.55
24 x 8	505	CFB248	DFB248	22.00	18.50	0.89	0.60
24 x 10	545	CFB2410	DFB2410	22.00	18.50	0.89	0.68
24 x 12	575	CFB2412	DFB2412	22.00	18.50	0.89	0.75
24x 14	635	CFB2414	DFB2414	22.00	18.50	0.89	0.66
24 x 16	685	CFB2416	DFB2416	22.00	18.50	0.89	0.70
24 x 18	675	CFB2418	DFB2418	22.00	18.50	0.89	0.75
24 x 20	740	CFB2420	DFB2420	22.00	18.50	0.89	0.80
30 x 12	840	CFB3012	DFB3012	25.00	21.50	1.03	0.75
30 x 14	1,090	CFB3014	DFB3014	25.00	21.50	1.03	0.66
30 x 16	900	CFB3016	DFB3016	25.00	21.50	1.03	0.70
30 x 18	980	CFB3018	DFB3018	25.00	21.50	1.03	0.75
30 x 20	1,070	CFB3020	DFB3020	25.00	21.50	1.03	0.80
30 x 24	1,205	CFB3024	DFB3024	25.00	21.50	1.03	0.89
36 x 12	1,195	CFB3612	DFB3612	28.00	24.50	1.15	0.75
36 x 14	1,215	CFB3614	DFB3614	28.00	24.50	1.15	0.66
36 x 16	1,255	CFB3616	DFB3616	28.00	24.50	1.15	0.70
36 x 18	1,295	CFB3618	DFB3618	28.00	24.50	1.15	0.75
36 x 20	1,360	CFB3620	DFB3620	28.00	24.50	1.15	0.80
36 x 24	1,520	CFB3624	DFB3624	28.00	24.50	1.15	0.89
36 x 30	1,785	CFB3630	DFB3630	28.00	24.50	1.15	1.03
42 x 12	1,655	CFB4212	DFB4212	31.00	27.50	1.28	0.75
42 x 14	1,675	CFB4214	DFB4214	31.00	27.50	1.28	0.66
42 x 16	1,715	CFB4216	DFB4216	31.00	27.50	1.28	0.70
42 x 18	1,755	CFB4218	DFB4218	31.00	27.50	1.28	0.75
42 x 20	1,895	CFB4220	DFB4220	31.00	27.50	1.28	0.80
42 x 24	1,980	CFB4224	DFB4224	31.00	27.50	1.28	0.89
42 x 30	2,345	CFB4230	DFB4230	31.00	27.50	1.28	1.03
42 x 36	3,390	CFB4236	DFB4236	31.00	27.50	1.28	1.15
48 x 12	2,175	CFB4812	DFB4812	34.00	30.50	1.42	0.75
48 x 14	2,195	CFB4814	DFB4814	34.00	30.50	1.42	0.66
48 x 16	2,235	CFB4816	DFB4816	34.00	30.50	1.42	0.70
48 x 18	2,275	CFB4818	DFB4818	34.00	30.50	1.42	0.75
48 x 20	2,340	CFB4820	DFB4820	34.00	30.50	1.42	0.80
48 x 24	3,240	CFB4824	DFB4824	34.00	30.50	1.42	0.89
48 x 30	3,600	CFB4830	DFB4830	34.00	30.50	1.42	1.03
48 x 36	3,255	CFB4836	DFB4836	34.00	30.50	1.42	1.15
48 x 42	4,685	CFB4842	DFB4842	34.00	30.50	1.42	1.28
54 x 48			DFB5448	39.00	33.50	0.90	0.94

LONG RADIUS BENDS 90°

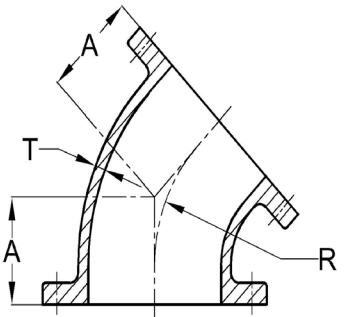
Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	B	R	T
2	20	CFL290	DFL290	6.50		0.31
3	30	CFL390	DFL390	7.75		0.48
4	50	CFL490	DFL490	9.00	7.00	0.52
5	65	CFL590	DFL590	10.25		0.52
6	80	CFL690	DFL690	11.50	9.50	0.55
8	140	CFL890	DFL890	14.00	12.00	0.60
10	215	CFL1090	DFL1090	16.50	14.50	0.68
12	325	CFL1290	DFL1290	19.00	17.00	0.75
14	385	CFL1490	DFL1490	21.50	19.00	0.66
16	505	CFL1690	DFL1690	24.00	21.50	0.70
18	630	CFL1890	DFL1890	26.50	24.00	0.75
20	810	CFL2090	DFL2090	29.00	26.50	0.80
24	1,240	CFL2490	DFL2490	34.00	30.50	0.89
30	2,105	CFL3090	DFL3090	41.50	38.00	1.03
36	3,285	CFL3690	DFL3690	49.00	45.50	1.15
42	4,865	CFL4290	DFL4290	56.50	53.00	1.28
48	6,790	CFL4890	DFL4890	64.00	60.50	1.42



Long Radius Bend 90°

LONG RADIUS BENDS 45°

Size	Wt.	Item No.	A	R	T
3		DFL345	5.25	7.85	0.48
4		DFL445	6.50	9.66	0.52
6		DFL645	8.50	13.28	0.55
8		DFL845	10.50	18.11	0.60
10		DFL1045	12.00	21.73	0.68
12		DFL1245	14.50	27.76	0.75



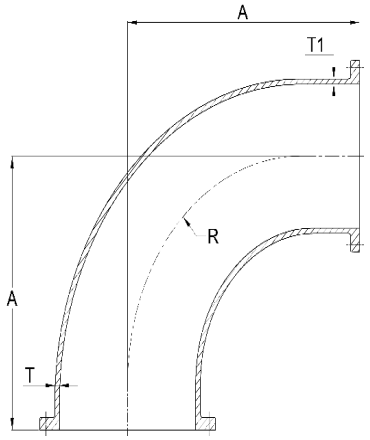
Long Radius Reducing Bend 45°

Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372

LONG RADIUS REDUCING BEND 90°

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

Size	Wt.	Item No.	A	R	T	T1
4 x 3		DFL43	9.00	7.00	0.52	0.48
6 x 3		DFL63	11.50	9.50	0.55	0.48
6 x 4		DFL64	11.50	9.50	0.55	0.52
8 x 4		DFL84	14.00	12.00	0.60	0.52
8 x 6		DFL86	14.00	12.00	0.60	0.55
10 x 4		DFL104	16.50	14.50	0.68	0.52
10 x 6		DFL106	16.50	14.50	0.68	0.55
10 x 8		DFL108	16.50	14.50	0.68	0.60
12 x 6		DFL126	19.00	17.00	0.75	0.55
12 x 8		DFL128	19.00	17.00	0.75	0.60
12 x 10		DFL1210	19.00	17.00	0.75	0.68
14 x 6		DFL146	21.50	19.00	0.66	0.55
14 x 8		DFL148	21.50	19.00	0.66	0.60
14 x 10		DFL1410	21.50	19.00	0.66	0.68
14 x 12		DFL1412	21.50	19.00	0.66	0.75
16 x 6		DFL166	24.00	21.50	0.70	0.55
16 x 8		DFL168	24.00	21.50	0.70	0.60
16 x 10		DFL1610	24.00	21.50	0.70	0.68
16 x 12		DFL1612	24.00	21.50	0.70	0.75
16 x 14		DFL1614	24.00	21.50	0.70	0.66
18 x 6		DFL186	26.50	24.00	0.75	0.55
18 x 8		DFL188	26.50	24.00	0.75	0.60
18 x 10		DFL1810	26.50	24.00	0.75	0.68
18 x 12		DFL1812	26.50	24.00	0.75	0.75
18 x 14		DFL1814	26.50	24.00	0.75	0.66
18 x 16		DFL1816	26.50	24.00	0.75	0.70
20 x 6		DFL206	29.00	26.50	0.80	0.55
20 x 8		DFL208	29.00	26.50	0.80	0.60
20 x 10		DFL2010	29.00	26.50	0.80	0.68
20 x 12		DFL2012	29.00	26.50	0.80	0.75
20 x 14		DFL2014	29.00	26.50	0.80	0.66
20 x 16		DFL2016	29.00	26.50	0.80	0.70
20 x 18		DFL2018	29.00	26.50	0.80	0.75
24 x 6		DFL246	34.00	30.50	0.89	0.55
24 x 8		DFL248	34.00	30.50	0.89	0.60
24 x 10		DFL2410	34.00	30.50	0.89	0.68
24 x 12		DFL2412	34.00	30.50	0.89	0.75
24x 14		DFL2414	34.00	30.50	0.89	0.66
24 x 16		DFL2416	34.00	30.50	0.89	0.70
24 x 18		DFL2418	34.00	30.50	0.89	0.75
24 x 20		DFL2420	34.00	30.50	0.89	0.80
30 x 12		DFL3012	41.50	38.00	1.03	0.75
30 x 14		DFL3014	41.50	38.00	1.03	0.66
30 x 16		DFL3016	41.50	38.00	1.03	0.70
30 x 18		DFL3018	41.50	38.00	1.03	0.75
30 x 20		DFL3020	41.50	38.00	1.03	0.80
30 x 24		DFL3024	41.50	38.00	1.03	0.89
36 x 12		DFL3612	49.00	45.50	1.15	0.75
36 x 14		DFL3614	49.00	45.50	1.15	0.66
36 x 16		DFL3616	49.00	45.50	1.15	0.70
36 x 18		DFL3618	49.00	45.50	1.15	0.75
36 x 20		DFL3620	49.00	45.50	1.15	0.80
36 x 24		DFL3624	49.00	45.50	1.15	0.89
36 x 30		DFL3630	49.00	45.50	1.15	1.03
42 x 12		DFL4212	56.50	53.00	1.28	0.75
42 x 14		DFL4214	56.50	53.00	1.28	0.66
42 x 16		DFL4216	56.50	53.00	1.28	0.70
42 x 18		DFL4218	56.50	53.00	1.28	0.75
42 x 20		DFL4220	56.50	53.00	1.28	0.80
42 x 24		DFL4224	56.50	53.00	1.28	0.89
42 x 30		DFL4230	56.50	53.00	1.28	1.03
42 x 36		DFL4236	56.50	53.00	1.28	1.15
48 x 12		DFL4812	64.00	60.50	1.42	0.75
48 x 14		DFL4814	64.00	60.50	1.42	0.66
48 x 16		DFL4816	64.00	60.50	1.42	0.70
48 x 18		DFL4818	64.00	60.50	1.42	0.75
48 x 20		DFL4820	64.00	60.50	1.42	0.80
48 x 24		DFL4824	64.00	60.50	1.42	0.89
48 x 30		DFL4830	64.00	60.50	1.42	1.03
48 x 36		DFL4836	64.00	60.50	1.42	1.15
48 x 42		DFL4842	64.00	60.50	1.42	1.28



Long Radius Reducing Bend 90°

Certified to NSF/ ANSI/CAN 61 and NSF/ANSI 372

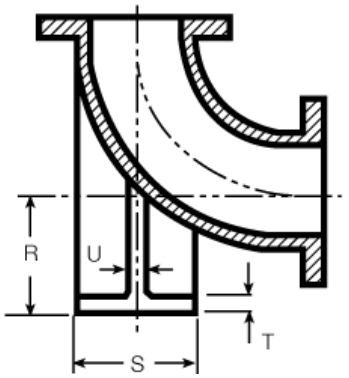
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AWWA MEMBER

LONG RADIUS BASE BEND 90°

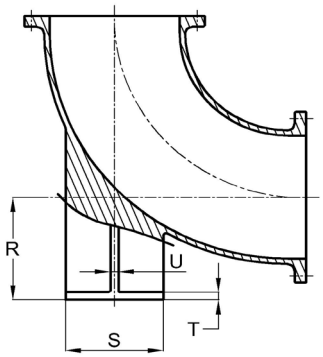
Size	Wt.	Item No.	R	S	T	U
12	420	DFN1290	11.25	11.00	1.00	1.00
20	985	DFN2090	16.00	13.50	1.12	1.12
24	1,430	DFN2490	18.50	13.50	1.12	1.12
24 X 16		DFN2416	18.50	13.50	1.12	1.12
24 x 20		DFN2420	18.50	13.50	1.12	1.12
36 x 30		DFN3630	26.00	19.00	1.25	1.15
48 x 42		DFN4842	34.00	25.00	1.56	1.42



Long Radius Base Bend 90°

BASE BENDS 90°

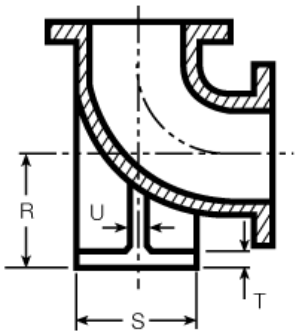
SIZE	CAST IRON Item No.	DUCTILE IRON Item No.	Weight		R	S	T	U
			Base Bend	Base Only				
3	CFD390	DFD390	35	10	4.88	5.00	0.56	0.50
4	CFD490	DFD490	55	10	5.50	6.00	0.62	0.50
6	CFD690	DFD690	85	20	7.00	7.00	0.69	0.62
8	CFD890	DFD890	145	40	8.38	9.00	0.94	0.88
10	CFD1090	DFD1090	210	45	9.75	9.00	0.94	0.88
12	CFD1290	DFD1290	300	65	11.25	11.00	1.00	1.00
14	CFD1490	DFD1490	360	70	12.50	11.00	1.00	1.00
16	CFD1690	DFD1690	445	75	13.75	11.00	1.00	1.00
18	CFD1890	DFD1890	565	115	15.00	13.50	1.12	1.12
20	CFD2090	DFD2090	700	120	16.00	13.50	1.12	1.12
24	CFD2490	DFD2490	1,030	130	18.50	13.50	1.12	1.12
30	CFD3090	DFD3090	1,625	190	23.00	16.00	1.19	1.15
36	CFD3690	DFD3690	2,385	250	26.00	19.00	1.25	1.15
42	CFD4290	DFD4290	3,465	410	30.00	23.50	1.44	1.28
48	CFD4890	DFD4890	4,610	515	34.00	25.00	1.56	1.42
60	CFD6090	DFD6090			42.00	32.00	1.88	1.75



Base Bend 90°

REDUCING BASE BENDS

Size	Item No.	Wt.	R	S	T	U
8 x 6	DFD86	120	8.38	9.00	0.94	0.88
10 x 8	DFD108	195	9.75	9.00	0.94	0.88
12 x 10	DFD1210	285	11.25	11.00	1.00	1.00
14 x 12	DFD1412	390	12.50	11.00	1.00	1.00
16 x 10	DFD1610	355	13.75	11.00	1.00	1.00
16 x 12	DFD1612	385	13.75	11.00	1.00	1.00
16 X 14	DFD1614		13.75	11.00	1.00	1.00
20 x 18	DFD2018	515	16.00	13.50	1.12	1.12
24 x 16	DFD2416	680	18.50	13.50	1.12	1.12
24 x 18	DFD2418	720	18.50	13.50	1.12	1.12
30 x 14	DFD3014	1,280	23.00	16.00	1.19	1.15
30 x 24	DFD3024	1,294	18.50	13.50	1.12	1.12
36 x 24	DFD3624	1,585	18.50	13.50	1.12	1.12



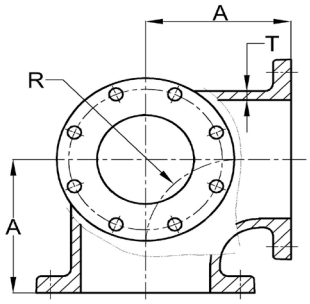
Reducing Base Bend

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

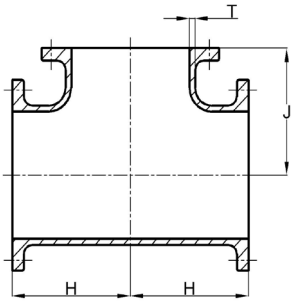
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SIDE OUTLET 90° BEND

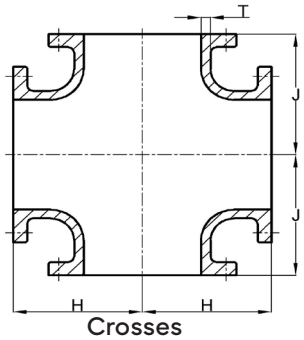
Size	Wt.	Item No.	A	R	T
3		DFO390	5.50	4.00	0.48
4		DFO490	6.50	4.50	0.52
6		DFO690	8.00	6.00	0.55
8		DFO890	9.00	7.00	0.60
10		DFO1090	11.00	9.00	0.68
12		DFO1290	12.00	10.00	0.75
14		DFO1490	14.00	11.50	0.66
16		DFO1690	15.00	12.50	0.70
18		DFO1890	16.50	14.00	0.75
20		DFO2090	18.00	15.50	0.80
24		DFO2490	22.00	18.50	0.89



Side Outlet 90° Bend



Tees



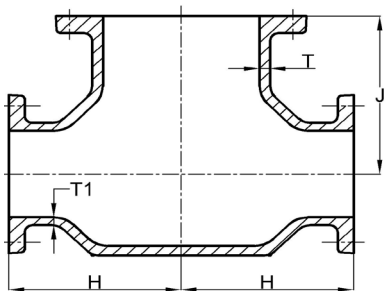
Crosses

TEES & CROSSES

Size	TEES		Wt.	H	J	T	CROSSES		Wt.
	CAST IRON Item No.	DUCTILE IRON Item No.					CAST IRON Item No.	DUCTILE IRON Item No.	
2	CFT22	DFT22	20	4.50	4.50	0.31	CFC22	DFC22	30
3	CFT33	DFT33	40	5.50	5.50	0.48	CFC33	DFC33	50
4	CFT44	DFT44	65	6.50	6.50	0.52	CFC44	DFC44	80
5	CFT55	DFT55	85	7.50	7.50	0.52	CFC55	DFC55	105
6	CFT66	DFT66	95	8.00	8.00	0.55	CFC66	DFC66	120
8	CFT88	DFT88	155	9.00	9.00	0.60	CFC88	DFC88	195
10	CFT1010	DFT1010	270	11.00	11.00	0.80	CFC1010	DFC1010	330
12	CFT1212	DFT1212	385	12.00	12.00	0.87	CFC1212	DFC1212	460
14	CFT1414	DFT1414	435	14.00	14.00	0.66	CFC1414	DFC1414	530
16	CFT1616	DFT1616	550	15.00	15.00	0.70	CFC1616	DFC1616	665
16		DFT1616-BG6		15.00	15.00	0.70			
18	CFT1818	DFT1818	665	16.50	16.50	0.75	CFC1818	DFC1818	795
20	CFT2020	DFT2020	855	18.00	18.00	0.80	CFC2020	DFC2020	1,015
24	CFT2424	DFT2424	1,330	22.00	22.00	0.89	CFC2424	DFC2424	1,570
30	CFT3030	DFT3030	2,150	25.00	25.00	1.03	CFC3030	DFC3030	2,500
36	CFT3636	DFT3636	3,160	28.00	28.00	1.15	CFC3636	DFC3636	3,620
42		DFT4242	4,470	31.00	31.00	1.28		DFC4242	5,065
48		DFT4848	5,900	34.00	34.00	1.42		DFC4848	6,570
54		DFT5454	6,025	39.00	39.00	1.05		DFC5454	6,780
60		DFT6060	8,045	43.00	43.00	1.10		DFC6060	9,220

BULLHEAD TEES

Size	DUCTILE IRON	Wt.	H	J	T	T1
4 x 4 x 6	DBT446	90	8.00	8.00	.52	.55
6 x 6 x 8	DBT668	140	9.00	9.00	.55	.60
8 x 8 x 10	DBT810	260	11.00	11.00	.60	.67
10 x 10 x 12	DBT101012	355	12.00	12.00	.80	.87
14 x 14 x 20	DBT141420					
20 x 20 x 30	DBT202030	1,737	25.00	25.00	1.03	0.80
24 x 24 x 30	DBT242430		25.00	25.00	1.03	0.89
24 x 24 x 36	DBT242436					
30 x 30 x 42	DBT303042	3,588	31.00	31.00	1.28	1.03
30 x 30 x 36	DBT303036					
42 x 42 x 60	DBT424260		44.50	43,00	1.10	0.88



Bullhead Tees

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

Certified to NSF/ ANSI/CAN 61 and NSF/ANSI 372

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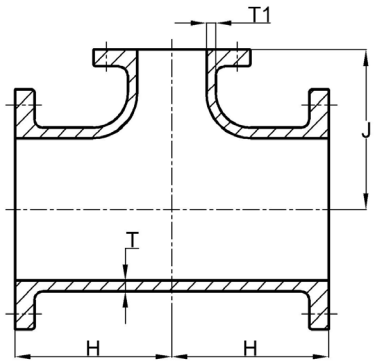
APPROVED

AWWA MEMBER

REDUCING TEES

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	H	J	T	T1
2 1/2 x 2 1/2	29	CFT2525	DFT2525	5.50	5.50	0.48	0.48
3 x 2	35	CFT32	DFT32	5.50	6.50	0.48	0.31
4 x 2	50	CFT42	DFT42	6.50	6.50	0.52	0.31
4 x 2 ½	55	CFT425	DFT425	6.50	6.50	0.52	0.31
4 x 3	60	CFT43	DFT43	6.50	6.50	0.52	0.48
6 x 2	85	CFT62	DFT62	8.00	8.00	0.55	0.31
6 x 3	85	CFT63	DFT63	8.00	8.00	0.55	0.48
6 x 4	90	CFT64	DFT64	8.00	8.00	0.55	0.52
8 x 2		CFT82		9.00	9.00	0.60	0.31
8 x 3		CFT83	DFT83	9.00	9.00	0.60	0.48
8 x 4	140	CFT84	DFT84	9.00	9.00	0.60	0.52
8 x 6	145	CFT86	DFT86	9.00	9.00	0.60	0.55
10 x 3			DFT103	11.00	11.00	0.68	0.48
10 x 4	205	CFT104	DFT104	11.00	11.00	0.68	0.52
10 x 6	215	CFT106	DFT106	11.00	11.00	0.68	0.55
10 x 8	225	CFT108	DFT108	11.00	11.00	0.68	0.60
12 x 4	290	CFT124	DFT124	12.00	12.00	0.75	0.52
12 x 6	295	CFT126	DFT126	12.00	12.00	0.75	0.55
12 x 8	310	CFT128	DFT128	12.00	12.00	0.75	0.60
12 x 10	360	CFT1210	DFT1210	12.00	12.00	0.87	0.80
14 x 4			DFT144	14.00	14.00	0.66	0.52
14 x 6	375	CFT146	DFT146	14.00	14.00	0.66	0.55
14 x 8	390	CFT148	DFT148	14.00	14.00	0.66	0.60
14 x 10	400	CFT1410	DFT1410	14.00	14.00	0.66	0.68
14 x 12	425	CFT1412	DFT1412	14.00	14.00	0.66	0.75
16 x 4			DFT164	15.00	15.00	0.70	0.52
16 x 6	465	CFT166	DFT166	15.00	15.00	0.70	0.55
16 x 8	475	CFT168	DFT168	15.00	15.00	0.70	0.60
16 x 10	495	CFT1610	DFT1610	15.00	15.00	0.70	0.68
16 x 12	520	CFT1612	DFT1612	15.00	15.00	0.70	0.75
16 x 14	530	CFT1614	DFT1614	15.00	15.00	0.70	0.66
18 x 6	480	CFT186	DFT186	13.00	15.50	0.75	0.55
18 x 8	495	CFT188	DFT188	13.00	15.50	0.75	0.60
18 x 10	510	CFT1810	DFT1810	13.00	15.50	0.75	0.68
18 x 12	535	CFT1812	DFT1812	13.00	15.50	0.75	0.75
18 x 14	630	CFT1814	DFT1814	16.50	16.50	0.75	0.66
18 x 16	650	CFT1816	DFT1816	16.50	16.50	0.75	0.70
20 x 4			DFT204	14.00	17.00	0.80	0.52
20 x 6	610	CFT206	DFT206	14.00	17.00	0.80	0.55
20 x 8	620	CFT208	DFT208	14.00	17.00	0.80	0.60
20 x 10	635	CFT2010	DFT2010	14.00	17.00	0.80	0.68
20 x 12	660	CFT2012	DFT2012	14.00	17.00	0.80	0.75
20 x 14	665	CFT2014	DFT2014	14.00	17.00	0.80	0.66
20 x 16	810	CFT2016	DFT2016	18.00	18.00	0.80	0.70
20 x 18	820	CFT2018	DFT2018	18.00	18.00	0.80	0.75
24 X 4			DFT244	15.00	19.00	0.89	0.52
24 x 6	845	CFT246	DFT246	15.00	19.00	0.89	0.55
24 x 8	860	CFT248	DFT248	15.00	19.00	0.89	0.60
24 x 10	880	CFT2410	DFT2410	15.00	19.00	0.89	0.68
24 x 12	890	CFT2412	DFT2412	15.00	19.00	0.89	0.75
24 x 14	900	CFT2414	DFT2414	15.00	19.00	0.89	0.66
24 x 16	915	CFT2416	DFT2416	15.00	19.00	0.89	0.70
24 x 18	1,220	CFT2418	DFT2418	22.00	22.00	0.89	0.75
24 x 20	1,255	CFT2420	DFT2420	22.00	22.00	0.89	0.80
30 x 12	1,490	CFT3012	DFT3012	18.00	23.00	1.03	0.75
30 x 14	1,490	CFT3014	DFT3014	18.00	23.00	1.03	0.66
30 x 16	1,505	CFT3016	DFT3016	18.00	23.00	1.03	0.70
30 x 18	1,515	CFT3018	DFT3018	18.00	23.00	1.03	0.75
30 x 20	1,540	CFT3020	DFT3020	18.00	23.00	1.03	0.80
30 x 24	2,025	CFT3024	DFT3024	25.00	25.00	1.03	0.89
36 x 6			DFT366	20.00	26.00	1.15	0.55
36 x 8			DFT368	20.00	26.00	1.15	0.60
36 x 12	2,170	CFT3612	DFT3612	20.00	26.00	1.15	0.75
36 x 14	2,175	CFT3614	DFT3614	20.00	26.00	1.15	0.66
36 x 16	2,185	CFT3616	DFT3616	20.00	26.00	1.15	0.70
36 x 18	2,190	CFT3618	DFT3618	20.00	26.00	1.15	0.75
36 x 20	2,210	CFT3620	DFT3620	20.00	26.00	1.15	0.80
36 x 24	2,255	CFT3624	DFT3624	20.00	26.00	1.15	0.89
36 x 30	3,000	CFT3630	DFT3630	28.00	28.00	1.15	1.03

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches



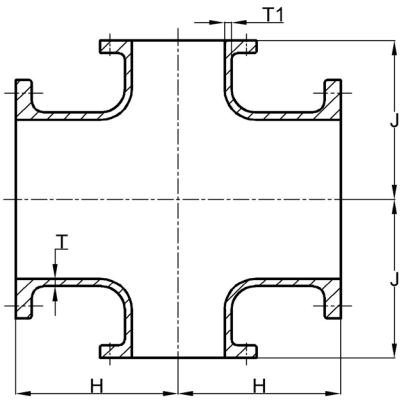
Reducing Tees

REDUCING TEES (continued)

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	H	J	T	T1
42 x 10			DFT4210	23.00	30.00	1.28	0.68
42 x 12	3,165	CFT4212	DFT4212	23.00	30.00	1.28	0.75
42 x 14	3,170	CFT4214	DFT4214	23.00	30.00	1.28	0.66
42 x 16	3,180	CFT4216	DFT4216	23.00	30.00	1.28	0.70
42 x 18	3,185	CFT4218	DFT4218	23.00	30.00	1.28	0.75
42 x 20	3,205	CFT4220	DFT4220	23.00	30.00	1.28	0.80
42 x 24	3,245	CFT4224	DFT4224	23.00	30.00	1.28	0.89
42 x 30	4,125	CFT4230	DFT4230	31.00	31.00	1.28	1.03
42 x 36	5,360		DFT4236	31.00	31.00	1.78	1.58
48 x 12	4,315	CFT4812	DFT4812	26.00	34.00	1.42	0.75
48 x 14	4,315	CFT4814	DFT4814	26.00	34.00	1.42	0.66
48 x 16	4,330	CFT4816	DFT4816	26.00	34.00	1.42	0.70
48 x 18	4,330	CFT4818	DFT4818	26.00	34.00	1.42	0.75
48 x 20	4,350	CFT4820	DFT4820	26.00	34.00	1.42	0.80
48 x 24	4,385	CFT4824	DFT4824	26.00	34.00	1.42	0.89
48 x 30	4,455	CFT4830	DFT4830	26.00	34.00	1.42	1.03
48 x 36	5,555	CFT4836	DFT4836	34.00	34.00	1.42	1.15
48 x 42	7,195		DFT4842	34.00	34.00	1.96	1.78
54 x 16			DFT5416	25.00	37.00	1.05	0.50
54 x 24	3,794		DFT5424	29.00	32.00	1.05	0.61
54 x 30			DFT5430	31.00	37.00	1.05	0.72
54 x 36	4,695		DFT5436	31.00	37.00	1.05	0.77
60 x 30			DFT6030	33.00	42.00	1.10	0.72
60 x 36	6,015		DFT6036	33.00	42.00	1.10	0.77
64 x 24			DFT6424	28.00	44.00	1.16	0.61
64 x 36			DFT6436	32.00	44.00	1.16	0.77
60 x 54	6,754		DFT6054	43.00	43.00	1.10	1.05

REDUCING CROSSES

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	H	J	T	T1
3 x 2	45	CFC32	DFC32	5.50	6.50	0.48	0.31
4 x 2	60	CFC42	DFC42	6.50	6.50	0.52	0.31
4 x 2 ½	65	CFC425	DFC425	6.50	6.50	0.52	0.31
4 x 3	70	CFC43	DFC43	6.50	6.50	0.52	0.48
6 x 2	90	CFC62	DFC62	8.00	8.00	0.55	0.31
6 x 3	95	CFC63	DFC63	8.00	8.00	0.55	0.48
6 x 4	110	CFC64	DFC64	8.00	8.00	0.55	0.52
8 x 4	155	CFC84	DFC84	9.00	9.00	0.60	0.52
8 x 6	165	CFC86	DFC86	9.00	9.00	0.60	0.55
10 x 4	220	CFC104	DFC104	11.00	11.00	0.68	0.52
10 x 6	240	CFC106	DFC106	11.00	11.00	0.68	0.55
10 x 8	265	CFC108	DFC108	11.00	11.00	0.68	0.60
12 x 4	310	CFC124	DFC124	12.00	12.00	0.75	0.52
12 x 6	320	CFC126	DFC126	12.00	12.00	0.75	0.55
12 x 8	345	CFC128	DFC128	12.00	12.00	0.75	0.60
12 x 10	415	CFC1210	DFC1210	12.00	12.00	0.87	0.80
14 x 6	400	CFC146	DFC146	14.00	14.00	0.66	0.55
14 x 8	425	CFC148	DFC148	14.00	14.00	0.66	0.60
14 x 10	460	CFC1410	DFC1410	14.00	14.00	0.66	0.68
14 x 12	505	CFC1412	DFC1412	14.00	14.00	0.66	0.75
16 x 6	490	CFC166	DFC166	15.00	15.00	0.70	0.55
16 x 8	520	CFC168	DFC168	15.00	15.00	0.70	0.60
16 x 10	555	CFC1610	DFC1610	15.00	15.00	0.70	0.68
16 x 12	605	CFC1612	DFC1612	15.00	15.00	0.70	0.75
16 x 14	620	CFC1614	DFC1614	15.00	15.00	0.70	0.66
18 x 6	505	CFC186	DFC186	13.00	15.50	0.75	0.55
18 x 8	535	CFC188	DFC188	13.00	15.50	0.75	0.60
18 x 10	560	CFC1810	DFC1810	13.00	15.50	0.75	0.68
18 x 12	610	CFC1812	DFC1812	13.00	15.50	0.75	0.75
18 x 14	720	CFC1814	DFC1814	16.50	16.50	0.75	0.66
18 x 16	765	CFC1816	DFC1816	16.50	16.50	0.75	0.70
20 x 6	635	CFC206	DFC206	14.00	17.00	0.80	0.55
20 x 8	665	CFC208	DFC208	14.00	17.00	0.80	0.60
20 x 10	685	CFC2010	DFC2010	14.00	17.00	0.80	0.68



Reducing Crosses

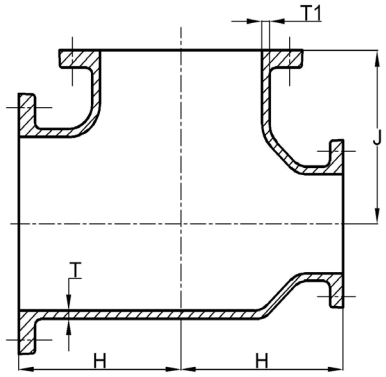
Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

REDUCING CROSSES (continuted)

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	H	J	T	T1
20 x 12	735	CFC2012	DFC2012	14.00	17.00	0.80	0.75
20 x 14	745	CFC2014	DFC2014	14.00	17.00	0.80	0.66
20 x 16	915	CFC2016	DFC2016	18.00	18.00	0.80	0.70
20 x 18	945	CFC2018	DFC2018	18.00	18.00	0.80	0.75
24 x 6	875	CFC246	DFC246	15.00	19.00	0.89	0.55
24 x 8	895	CFC248	DFC248	15.00	19.00	0.89	0.60
24 x 10	930	CFC2410	DFC2410	15.00	19.00	0.89	0.68
24 x 12	960	CFC2412	DFC2412	15.00	19.00	0.89	0.75
24 x 14	975	CFC2414	DFC2414	15.00	19.00	0.89	0.66
24 x 16	1,010	CFC2416	DFC2416	15.00	19.00	0.89	0.70
24 x 18	1,365	CFC2418	DFC2418	22.00	22.00	0.89	0.75
24 x 20	1,430	CFC2420	DFC2420	22.00	22.00	0.89	0.80
30 x 12	1,565	CFC3012	DFC3012	18.00	23.00	1.03	0.75
30 x 14	1,570	CFC3014	DFC3014	18.00	23.00	1.03	0.66
30 x 16	1,605	CFC3016	DFC3016	18.00	23.00	1.03	0.70
30 x 18	1,615	CFC3018	DFC3018	18.00	23.00	1.03	0.75
30 x 20	1,670	CFC3020	DFC3020	18.00	23.00	1.03	0.80
30 x 24	2,245	CFC3024	DFC3024	25.00	25.00	1.03	0.89
36 x 12	2,240	CFC3612	DFC3612	20.00	26.00	1.15	0.75
36 x 14	2,240	CFC3614	DFC3614	20.00	26.00	1.15	0.66
36 x 16	2,270	CFC3616	DFC3616	20.00	26.00	1.15	0.70
36 x 18	2,280	CFC3618	DFC3618	20.00	26.00	1.15	0.75
36 x 20	2,325	CFC3620	DFC3620	20.00	26.00	1.15	0.80
36 x 24	2,405	CFC3624	DFC3624	20.00	26.00	1.15	0.89
36 x 30	3,300	CFC3630	DFC3630	28.00	28.00	1.15	1.03
42 x 12	3,240	CFC4212	DFC4212	23.00	30.00	1.28	0.75
42 x 14	3,240	CFC4214	DFC4214	23.00	30.00	1.28	0.66
42 x 16	3,270	CFC4216	DFC4216	23.00	30.00	1.28	0.70
42 x 18	3,275	CFC4218	DFC4218	23.00	30.00	1.28	0.75
42 x 20	3,320	CFC4220	DFC4220	23.00	30.00	1.28	0.80
42 x 24	3,395	CFC4224	DFC4224	23.00	30.00	1.28	0.89
42 x 30	4,375	CFC4230	DFC4230	31.00	31.00	1.28	1.03
42 x 36	5,720		DFC4236	31.00	31.00	1.78	1.58
48 x 12	4,390	CFC4812	DFC4812	26.00	34.00	1.42	0.75
48 x 14	4,385	CFC4814	DFC4814	26.00	34.00	1.42	0.66
48 x 16	4,415	CFC4816	DFC4816	26.00	34.00	1.42	0.70
48 x 18	4,420	CFC4818	DFC4818	26.00	34.00	1.42	0.75
48 x 20	4,460	CFC4820	DFC4820	26.00	34.00	1.42	0.80
48 x 24	4,535	CFC4824	DFC4824	26.00	34.00	1.42	0.89
48 x 30	4,670	CFC4830	DFC4830	26.00	34.00	1.42	1.03
48 x 36	5,880	CFC4836	DFC4836	34.00	34.00	1.42	1.15
48 x 42	7,630	CFC4842	DFC4842	34.00	34.00	1.96	1.78
60 x 48	8,105	CFC6048	DFC6048	43.00	43.00	1.10	0.94

REDUCING TEES

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	H	J	T	T1
6 x 4 x 4	85	CRT644	DRT644	8.00	8.00	0.55	0.52
6 x 4 x 6	90	CRT646	DRT646	8.00	8.00	0.55	0.55
8 x 6 x 4	125	CRT864	DRT864	9.00	9.00	0.60	0.55
8 x 6 x 6	135	CRT866	DRT866	9.00	9.00	0.60	0.55
8 x 6 x 8	145	CRT868	DRT868	9.00	9.00	0.60	0.60
10 x 8 x 10			DRT10810	11.00	11.00	0.68	0.60
12 x 8 x 12			DRT12812	12.00	12.00	0.75	0.60
14 x 8 x 14			DRT14814	14.00	14.00	0.66	0.60
16 x 12 x 12			DRT161212	15.00	15.00	0.70	0.75
18 x 12 x 18			DRT181218	16.50	16.50	0.75	0.75
24 x 16 x 16			DRT241616	17.00	19.00	0.89	0.70
24 x 20 x 20			DRT242020	22.00	22.00	0.89	0.80
24 x 20 x 24			DRT242024	22.00	22.00	0.89	0.80
30 x 20 x 20			DRT302020	25.00	23.00	1.03	0.80
30 x 20 x 24			DRT302024	25.00	25.00	1.03	0.80
30 x 20 x 30			DRT302030	25.00	25.00	1.03	0.80
30 x 24 x 30			DRT302430	25.00	25.00	1.03	0.89



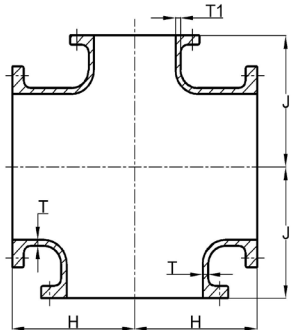
Reducing Tees

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

Certified to NSF/ ANSI/CAN 61 and NSF/ANSI 372

REDUCING CROSS

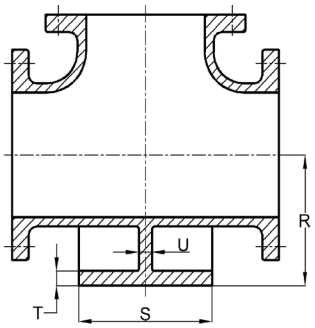
Size	Wt.	Item No.	H	J	T	T1
20x20x20x12		DFC20202012	18.00	18.00	0.80	0.75
30x30x30x24		DFC30303024	25.00	25.00	1.03	0.89
36x36x36x24		DFC36363624	28.00	28.00	1.15	0.89
36x36x36x42		DFC36363642	31.00	31.00	1.78	1.58
36x36x36x48		DFC36363648	34.00	34.00	1.42	1.15



Reducing Crosses

BASE TEES

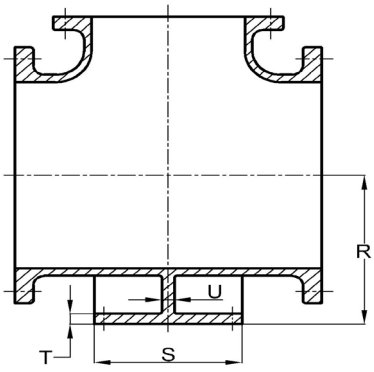
Size	CAST IRON Item No.	DUCTILE IRON Item No.	WEIGHT		R	S	T	U	Base - Bolt Hole Diam.
			Base Tee	Base Only					
3	CFV33	DFV33	45	5	4.88	5.00	0.56	0.50	5/8
4	CFV44	DFV44	75	10	5.50	6.00	0.62	0.50	3/4
6	CFV66	DFV66	110	15	7.00	7.00	0.69	0.62	3/4
8	CFV88	DFV88	185	30	8.38	9.00	0.94	0.88	3/4
10	CFV1010	DFV1010	300	30	9.75	9.00	0.94	0.88	3/4
12	CFV1212	DFV1212	430	45	11.25	11.00	1.00	1.00	7/8
14	CFV1414	DFV1414	485	50	12.50	11.00	1.00	1.00	7/8
16	CFV1616	DFV1616	600	50	13.75	11.00	1.00	1.00	7/8
18	CFV1818	DFV1818	740	75	15.00	13.50	1.12	1.12	7/8
20	CFV2020	DFV2020	930	75	16.00	13.50	1.12	1.12	7/8
24	CFV2424	DFV2424	1,410	80	18.50	13.50	1.12	1.12	7/8
30	CFV3030	DFV3030	2,270	120	23.00	16.00	1.19	1.15	1
36	CFV3636	DFV3636	3,320	160	26.00	19.00	1.25	1.15	1
42		DFV4242	5,850	270	30.00	23.50	1.44	1.28	1 1/8
48		DFV4848	7,720	335	34.00	25.00	1.56	1.42	1 1/4



Base Tees

REDUCING BASE TEES

Size	Wt.	Item No.	R	S	T	U
4 x 3	70	DFV43	5.50	6.00	0.62	0.50
6 x 3	100	DFV63	7.00	7.00	0.69	0.62
6 x 4	105	DFV64	7.00	7.00	0.69	0.62
8 x 4	170	DFV84	8.38	9.00	0.94	0.88
8 x 6	187	DFV86	8.38	9.00	0.94	0.88
10 x 4	235	DFV104	9.75	9.00	0.94	0.88
10 x 6	245	DFV106	9.75	9.00	0.94	0.88
10 x 8	330	DFV108	9.75	9.00	0.94	0.88
12 x 4	335	DFV124	11.25	11.00	1.00	1.00
12 x 6	340	DFV126	11.25	11.00	1.00	1.00
12 x 8	355	DFV128	11.25	11.00	1.00	1.00
12 x 10	405	DFV1210	11.25	11.00	1.00	1.00
14 x 6	425	DFV146	12.50	11.00	1.00	1.00
14 x 8	440	DFV148	12.50	11.00	1.00	1.00
14 x 10	450	DFV1410	12.50	11.00	1.00	1.00
14 x 12	475	DFV1412	12.50	11.00	1.00	1.00
16 x 6	515	DFV166	13.75	11.00	1.00	1.00
16 x 8	525	DFV168	13.75	11.00	1.00	1.00
16 x 10	545	DFV1610	13.75	11.00	1.00	1.00
16 x 12	570	DFV1612	13.75	11.00	1.00	1.00
16 x 14	580	DFV1614	13.75	11.00	1.00	1.00
18 x 6	555	DFV186	15.00	13.50	1.12	1.12
18 x 8	570	DFV188	15.00	13.50	1.12	1.12
18 x 10	585	DFV1810	15.00	13.50	1.12	1.12
18 x 12	640	DFV1812	15.00	13.50	1.12	1.12
18 x 14	705	DFV1814	15.00	13.50	1.12	1.12
18 x 16	725	DFV1816	15.00	13.50	1.12	1.12
20 x 6	685	DFV206	16.00	13.50	1.12	1.12
20 x 8	695	DFV208	16.00	13.50	1.12	1.12
20 x 10	710	DFV2010	16.00	13.50	1.12	1.12
20 x 12	681	DFV2012	16.00	13.50	1.12	1.12



Reducing Base Tees

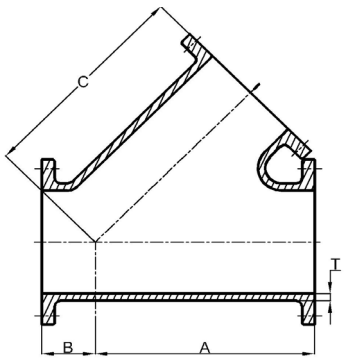
Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

REDUCING BASE TEES (continued)

Size	Wt.	Item No.	R	S	T	U
20 x 14	740	DFV2014	16.00	13.50	1.12	1.12
20 x 16	885	DFV2016	16.00	13.50	1.12	1.12
20 x 18	895	DFV2018	16.00	13.50	1.12	1.12
24 x 6	925	DFV246	18.50	13.50	1.12	1.12
24 x 8	940	DFV248	18.50	13.50	1.12	1.12
24 x 10	960	DFV2410	18.50	13.50	1.12	1.12
24 x 12	970	DFV2412	18.50	13.50	1.12	1.12
24 x 14	980	DFV2414	18.50	13.50	1.12	1.12
24 x 16	993	DFV2416	18.50	13.50	1.12	1.12
24 x 18	1,300	DFV2418	18.50	13.50	1.12	1.12
24 x 20	1,335	DFV2420	18.50	13.50	1.12	1.12
30 x 6	1,344	DFV306	23.00	16.00	1.19	1.15
30 x 8	1,344	DFV308	23.00	16.00	1.19	1.15
30 x 12	1,610	DFV3012	23.00	16.00	1.19	1.15
30 x 14	1,610	DFV3014	23.00	16.00	1.19	1.15
30 x 16	1,622	DFV3016	23.00	16.00	1.19	1.15
30 x 18	1,635	DFV3018	23.00	16.00	1.19	1.15
30 x 20	1,660	DFV3020	23.00	16.00	1.19	1.15
30 x 24	2,145	DFV3024	23.00	16.00	1.19	1.15
36 x 12	2,027	DFV3612	26.00	19.00	1.25	1.15
36 x 14	2,335	DFV3614	26.00	19.00	1.25	1.15
36 x 16	2,345	DFV3616	26.00	19.00	1.25	1.15
36 x 18	2,350	DFV3618	26.00	19.00	1.25	1.15
36 x 20	2,370	DFV3620	26.00	19.00	1.25	1.15
36 x 24	2,415	DFV3624	26.00	19.00	1.25	1.15
36 x 30	3,160	DFV3630	26.00	19.00	1.25	1.15
42 x 12	3,435	DFV4212	30.00	23.50	1.44	1.28
42 x 14	3,440	DFV4214	30.00	23.50	1.44	1.28
42 x 16	3,450	DFV4216	30.00	23.50	1.44	1.28
42 x 18	3,455	DFV4218	30.00	23.50	1.44	1.28
42 x 20	3,475	DFV4220	30.00	23.50	1.44	1.28
42 x 24	3,515	DFV4224	30.00	23.50	1.44	1.28
42 x 30	4,395	DFV4230	30.00	23.50	1.44	1.28
42 x 36	4,630	DFV4236	30.00	23.50	1.44	1.28
48 x 12	4,650	DFV4812	34.00	25.00	1.56	1.42
48 x 14	4,650	DFV4814	34.00	25.00	1.56	1.42
48 x 16	4,665	DFV4816	34.00	25.00	1.56	1.42
48 x 18	4,665	DFV4818	34.00	25.00	1.56	1.42
48 x 20	4,685	DFV4820	34.00	25.00	1.56	1.42
48 x 24	4,720	DFV4824	34.00	25.00	1.56	1.42
48 x 30	4,970	DFV4830	34.00	25.00	1.56	1.42
48 x 36	5,890	DFV4836	34.00	25.00	1.56	1.42
48 x 42	6,055	DFV4842	34.00	25.00	1.56	1.42

45° LATERAL WYES

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	B	C	T
3	45	CFY33	DFY33	10.00	3.00	10.00	0.48
4	75	CFY44	DFY44	12.00	3.00	12.00	0.52
6	120	CFY66	DFY66	14.50	3.50	14.50	0.55
8	200	CFY88	DFY88	17.50	4.50	17.50	0.60
10	335	CFY1010	DFY1010	20.50	5.00	20.50	0.80
12	515	CFY1212	DFY1212	24.50	5.50	24.50	0.87
14	605	CFY1414	DFY1414	27.00	6.00	27.00	0.66
16	805	CFY1616	DFY1616	30.00	6.50	30.00	0.70
18	980	CFY1818	DFY1818	32.00	7.00	32.00	0.75
20	1,265	CFY2020	DFY2020	35.00	8.00	35.00	0.80
24	1,905	CFY2424	DFY2424	40.50	9.00	40.50	0.89
30	3,225	CFY3030	DFY3030	52.50	18.30	52.50	1.03
36	5,740	CFY3636	DFY3636	60.00	19.50	60.00	1.15
42	9,170	CFY4242	DFY4242	71.00	15.00	71.00	1.28
48	12,100	CFY4848	DFY4848	77.00	16.00	77.00	1.42
60			DFY6060	100.00	25.00	100.00	1.10

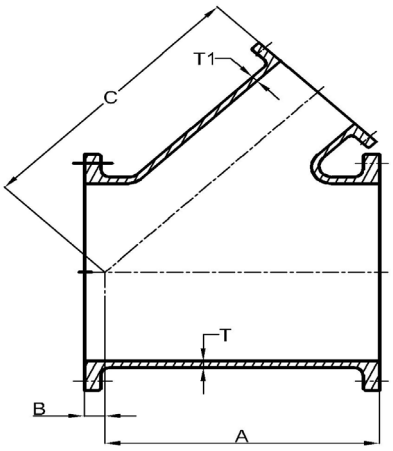


45° Lateral Wyes

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

45° LATERAL REDUCING WYES

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	B	C	T	T1
4 x 3	65	CFY43	DFY43	12.00	3.00	12.00	0.52	0.48
6 x 3	100	CFY63	DFY63	14.50	3.50	14.50	0.55	0.48
6 x 4	115	CFY64	DFY64	14.50	3.50	14.50	0.55	0.52
8 x 4	180	CFY84	DFY84	17.50	4.50	17.50	0.60	0.52
8 x 6	190	CFY86	DFY86	17.50	4.50	17.50	0.60	0.55
10 x 4	260	CFY104	DFY104	20.50	5.00	20.50	0.68	0.52
10 x 6	270	CFY106	DFY106	20.50	5.00	20.50	0.68	0.55
10 x 8	295	CFY108	DFY108	20.50	5.00	20.50	0.68	0.60
12 x 4	380	CFY124	DFY124	24.50	5.50	24.50	0.75	0.52
12 x 6	395	CFY126	DFY126	24.50	5.50	24.50	0.75	0.55
12 x 8	420	CFY128	DFY128	24.50	5.50	24.50	0.75	0.60
12 x 10	455	CFY1210	DFY1210	24.50	5.50	24.50	0.87	0.80
14 x 4	505		DFY144	27.00	6.00	27.00	0.66	0.52
14 x 6	520		DFY146	27.00	6.00	27.00	0.66	0.55
14 x 8	545		DFY148	27.00	6.00	27.00	0.66	0.60
14 x 10	580		DFY1410	27.00	6.00	27.00	0.66	0.68
14 x 12	620		DFY1412	27.00	6.00	27.00	0.66	0.75
16 x 4	665		DFY164	27.00	6.00	27.00	0.70	0.52
16 x 6	680		DFY166	30.00	6.50	30.00	0.70	0.55
16 x 8	710		DFY168	30.00	6.50	30.00	0.70	0.60
16 x 10	740		DFY1610	30.00	6.50	30.00	0.70	0.68
16 x 12	785		DFY1612	30.00	6.50	30.00	0.70	0.75
16 x 14	830		DFY1614	30.00	6.50	30.00	0.70	0.66
18 x 4	275		DFY184	25.00	1.00	27.50	0.75	0.52
18 x 6	450		DFY186	32.00	7.00	32.00	0.75	0.55
18 x 8	625		DFY188	32.00	7.00	32.00	0.75	0.60
18 x 10	885		DFY1810	32.00	7.00	32.00	0.75	0.68
18 x 12	930		DFY1812	32.00	7.00	32.00	0.75	0.75
18 x 14	975		DFY1814	32.00	7.00	32.00	0.75	0.66
18 x 16	1,025		DFY1816	32.00	7.00	32.00	0.75	0.70
20 x 4	710		DFY204	27.00	1.00	29.50	0.80	0.52
20 x 6	720		DFY206	24.00	1.00	29.50	0.80	0.55
20 x 8	740		DFY208	35.00	8.00	35.00	0.80	0.60
20 x 10	805		DFY2010	35.00	8.00	35.00	0.80	0.68
20 x 12	1,110		DFY2012	35.00	8.00	35.00	0.80	0.75
20 x 14	1,215		DFY2014	35.00	8.00	35.00	0.80	0.66
20 x 16	1,270		DFY2016	35.00	8.00	35.00	0.80	0.70
20 x 18	1,315		DFY2018	35.00	8.00	35.00	0.80	0.75
24 x 4	790		DFY244	31.50	0.50	34.50	0.89	0.52
24 x 6	1,060		DFY246	31.50	0.50	34.50	0.89	0.55
24 x 8	1,080		DFY248	40.50	9.00	40.50	0.89	0.60
24 x 10	1,105		DFY2410	40.50	9.00	40.50	0.89	0.68
24 x 12	1,200		DFY2412	40.50	9.00	40.50	0.89	0.75
24 x 14	1,750		DFY2414	40.50	9.00	40.50	0.89	0.66
24 x 16	1,805		DFY2416	40.50	9.00	40.50	0.89	0.70
24 x 18	1,855		DFY2418	40.50	9.00	40.50	0.89	0.75
24 x 20	1,930		DFY2420	40.50	9.00	40.50	0.89	0.80
30 x 12	2,795		DFY3012	49.00	10.00	49.00	1.03	0.75
30 x 14	2,850		DFY3014	49.00	10.00	49.00	1.03	0.66
30 x 16	2,905		DFY3016	49.00	10.00	49.00	1.03	0.70
30 x 18	2,960		DFY3018	49.00	10.00	49.00	1.03	0.75
30 x 20	3,040		DFY3020	49.00	10.00	49.00	1.03	0.80
30 x 24	3,205		DFY3024	49.00	10.00	49.00	1.03	0.89
36 x 12	4,490		DFY3612	54.00	15.30	54.00	1.15	0.75
36 x 14	4,545		DFY3614	54.00	15.30	54.00	1.15	0.66
36 x 16	4,455		DFY3616	54.00	15.30	54.00	1.15	0.70
36 x 18	4,505		DFY3618	54.00	15.30	54.00	1.15	0.75
36 x 20	4,575		DFY3620	54.00	15.30	54.00	1.15	0.80
36 x 24	4,725		DFY3624	54.00	15.30	54.00	1.15	0.89
36 x 30	5,200		DFY3630	56.00	15.30	56.00	1.15	1.03
42 x 12	5,725		DFY4212	60.00	12.00	60.00	1.28	0.75
42 x 14	5,800		DFY4214	60.00	12.00	60.00	1.28	0.66
42 x 16	5,850		DFY4216	60.00	12.00	60.00	1.28	0.70
42 x 18	6,000		DFY4218	60.00	12.00	60.00	1.28	0.75
42 x 20	6,110		DFY4220	60.00	12.00	60.00	1.28	0.80
42 x 24	6,255		DFY4224	60.00	12.00	60.00	1.28	0.89
42 x 30	6,855		DFY4230	63.00	12.00	63.00	1.28	1.03
42 x 36	7,650		DFY4236	66.00	12.00	66.00	1.28	1.15
48 x 12	7,200		DFY4812	65.00	9.00	65.00	1.42	0.75



45° Lateral Reducing Wyes

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

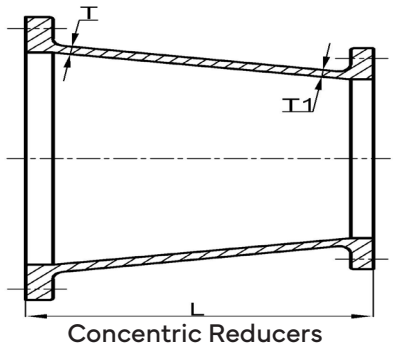
Certified to NSF/ ANSI/CAN 61 and NSF/ANSI 372

45° LATERAL REDUCING WYES (continued)

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	B	C	T	T1
48 x 14	7,275		DFY4814	65.00	9.00	65.00	1.42	0.66
48 x 16	7,400		DFY4816	65.00	9.00	65.00	1.42	0.70
48 x 18	7,620		DFY4818	65.00	9.00	65.00	1.42	0.75
48 x 20	7,685		DFY4820	65.00	9.00	65.00	1.42	0.80
48 x 24	6,840		DFY4824	58.00	5.00	64.00	1.42	0.89
48 x 30	8,015		DFY4830	63.00	9.00	68.00	1.42	1.03
48 x 36	8,970		DFY4836	69.00	7.00	72.00	1.42	1.15
48 x 42	11,010		DFY4842	77.00	12.00	77.00	1.42	1.28
54 x 36			DFY5436	78.00	12.00	78.00	1.05	0.77
54 x 42			DFY5442	80.00	12.00	80.00	0.90	0.82
60 x 36			DFY6036	80.00	12.00	80.00	0.94	0.66
64 x 36			DFY6436	100.00	10.00	105.00	1.16	0.77

CONCENTRIC REDUCERS

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	L	T	T1
2 1/2 x 2		CFR252	DFR252	6.00	0.48	0.31
3 x 2	16	CFR32	DFR32	6.00	0.48	0.31
3 x 2 1/2	21	CFR325	DFR325	6.00	0.48	0.31
4 x 2	25	CFR42	DFR42	7.00	0.52	0.31
4 x 2 1/2	28	CFR425	DFR425	7.00	0.52	0.31
4 x 3	30	CFR43	DFR43	7.00	0.52	0.48
6 x 2	35	CFR62	DFR62	9.00	0.55	0.31
6 x 2 1/2	38	CFR625	DFR625	9.00	0.55	0.31
6 x 3	40	CFR63	DFR63	9.00	0.55	0.48
6 x 4	45	CFR64	DFR64	9.00	0.55	0.52
6 x 5	51	CFR65	DFR65	10.00	0.55	0.52
8 x 4	65	CFR84	DFR84	11.00	0.60	0.52
8 x 5	70	CFR85	DFR85	11.00	0.60	0.52
8 x 6	75	CFR86	DFR86	11.00	0.60	0.55
10 x 4	85	CFR104	DFR104	12.00	0.68	0.52
10 x 6	90	CFR106	DFR106	12.00	0.68	0.55
10 x 8	110	CFR108	DFR108	12.00	0.68	0.60
12 x 4	120	CFR124	DFR124	14.00	0.75	0.52
12 x 6	130	CFR126	DFR126	14.00	0.75	0.55
12 x 8	145	CFR128	DFR128	14.00	0.75	0.60
12 x 10	170	CFR1210	DFR1210	14.00	0.75	0.68
14 x 6	155	CFR146	DFR146	16.00	0.66	0.55
14 x8	175	CFR148	DFR148	16.00	0.66	0.60
14 x 10	190	CFR1410	DFR1410	16.00	0.66	0.68
14 x 12	220	CFR1412	DFR1412	16.00	0.66	0.75
16x6	190	CFR166	DFR166	18.00	0.70	0.55
16 x 8	210	CFR168	DFR168	18.00	0.70	0.60
16 x 10	235	CFR1610	DFR1610	18.00	0.70	0.68
16 x 12	265	CFR1612	DFR1612	18.00	0.70	0.75
16 x 14	280	CFR1614	DFR1614	18.00	0.70	0.66
18 x 6			DFR186	19.00	0.75	0.55
18 x 8	240	CFR188	DFR188	19.00	0.75	0.60
18 x 10	265	CFR1810	DFR1810	19.00	0.75	0.68
18 x 12	295	CFR1812	DFR1812	19.00	0.75	0.75
18 x 14	310	CFR1814	DFR1814	19.00	0.75	0.66
18 x 16	340	CFR1816	DFR1816	19.00	0.75	0.70
20 x 6			DFR206	20.00	0.80	0.55
20 x 8			DFR208	20.00	0.80	0.60
20 x 10	310	CFR2010	DFR2010	20.00	0.80	0.68
20 x 12	345	CFR2012	DFR2012	20.00	0.80	0.75
20 x 14	355	CFR2014	DFR2014	20.00	0.80	0.66
20 x 16	390	CFR2016	DFR2016	20.00	0.80	0.70
20 x 18	410	CFR2018	DFR2018	20.00	0.80	0.75
24 x 6			DFR246	24.00	0.89	0.55
24 x 10			DFR2410	24.00	0.89	0.68
24 x 12	480	CFR2412	DFR2412	24.00	0.89	0.75
24 x 14	490	CFR2414	DFR2414	24.00	0.89	0.66
24 x 16	525	CFR2416	DFR2416	24.00	0.89	0.70
24 x 18	550	CFR2418	DFR2418	24.00	0.89	0.75
24 x 20	590	CFR2420	DFR2420	24.00	0.89	0.80
30 x 6			DFR306	30.00	1.03	0.55
30 x 16			DFR3016	30.00	1.03	0.70
30 x 18	810	CFR3018	DFR3018	30.00	1.03	0.75
30 x 20	870	CFR3020	DFR3020	30.00	1.03	0.80
30 x 24	970	CFR3024	DFR3024	30.00	1.03	0.89
36 x 14			DFR3614	36.00	1.15	0.66
36 x 16			DFR3616	36.00	1.15	0.70
36 x 18			DFR3618	36.00	1.15	0.75
36 x 20	1,230	CFR3620	DFR3620	36.00	1.15	0.80
36 x 24	1,345	CFR3624	DFR3624	36.00	1.15	0.89
36 x 30	1,555	CFR3630	DFR3630	36.00	1.15	1.03
42 x 24	1,820	CFR4224	DFR4224	42.00	1.28	0.89
42 x 30	2,060	CFR4230	DFR4230	42.00	1.28	1.03
42 x 36	2,345	CFR4236	DFR4236	42.00	1.28	1.15
48 x 14			DFR4814	48.00	1.42	0.66
48 x 24			DFR4824	48.00	1.42	0.89
48 x 30	2,625	CFR4830	DFR4830	48.00	1.42	1.03
48 x 36	2,950	CFR4836	DFR4836	48.00	1.42	1.15
48 x 42	3,320	CFR4842	DFR4842	48.00	1.42	1.28
54 x 36			DFR5436	28.00	0.90	0.66
54 x 48	1,695	CFR5448	DFR5448	18.00	0.90	0.80
60 x 36			DFR6036	32.00	0.94	0.66
60 x 48			DFR6048	32.00	0.94	0.80
60 x 54			DFR6054	15.00	0.94	0.90
72 x 36			DFR7236	40.00	1.40	1.15
72 x 48			DFR7248	40.00	1.40	1.40
72 x 54			DFR7254	40.00	1.40	0.90



Concentric Reducers

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

Certified to NSF/ ANSI/CAN 61 and NSF/ANSI 372

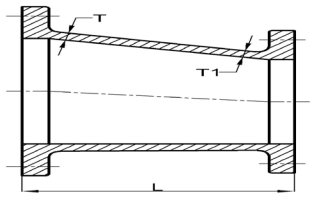
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APPROVED

AWWA MEMBER

ECCENTRIC REDUCERS

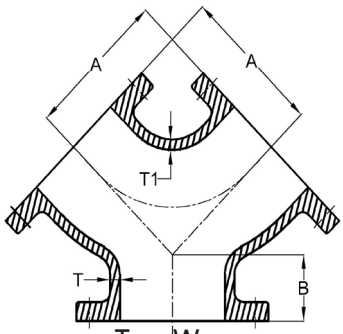
Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	L	T	T1
3 x 2	16	CFE32	DFE32	6.00	0.48	0.31
3 x 2 1/2	21	CFE325	DFE325	6.00	0.48	0.31
4 x 2	25	CFE42	DFE42	7.00	0.52	0.31
4 x 2 1/2	28	CFE425	DFE425	7.00	0.52	0.31
4 x 3	30	CFE43	DFE43	7.00	0.52	0.48
6 x 2	35	CFE62	DFE62	9.00	0.55	0.31
6 x 2 1/2	38	CFE625	DFE625	9.00	0.55	0.31
6 x 3	40	CFE63	DFE63	9.00	0.55	0.48
6 x 4	45	CFE64	DFE64	9.00	0.55	0.52
6 x5	51	CFE65	DFE65	9.00	0.55	0.52
8 x 4	65	CFE84	DFE84	11.00	0.60	0.52
8 x 5	70	CFE85	DFE85	11.00	0.60	0.52
8 x 6	75	CFE86	DFE86	11.00	0.60	0.55
10 x 4	85	CFE104	DFE104	12.00	0.68	0.52
10 x 6	90	CFE106	DFE106	12.00	0.68	0.55
10 x 8	110	CFE108	DFE108	12.00	0.68	0.60
12 x 4	120	CFE124	DFE124	14.00	0.75	0.52
12 x 6	130	CFE126	DFE126	14.00	0.75	0.55
12 x 8	145	CFE128	DFE128	14.00	0.75	0.60
12 x 10	170	CFE1210	DFE1210	14.00	0.75	0.68
14 x 6	155	CFE146	DFE146	16.00	0.66	0.55
14 x 8	175	CFE148	DFE148	16.00	0.66	0.60
14 x 10	190	CFE1410	DFE1410	16.00	0.66	0.68
14 x 12	220	CFE1412	DFE1412	16.00	0.66	0.75
16 x 6	190	CFE166	DFE166	18.00	0.70	0.55
16 x 8	210	CFE168	DFE168	18.00	0.70	0.60
16 x 10	235	CFE1610	DFE1610	18.00	0.70	0.68
16 x 12	265	CFE1612	DFE1612	18.00	0.70	0.75
16 x 14	280	CFE1614	DFE1614	18.00	0.70	0.66
18 x 6			DFE186	19.00	0.75	0.55
18 x 8	240	CFE188	DFE188	19.00	0.75	0.60
18 x 10	265	CFE1810	DFE1810	19.00	0.75	0.68
18 x 12	295	CFE1812	DFE1812	19.00	0.75	0.75
18 x 14	310	CFE1814	DFE1814	19.00	0.75	0.66
18 x 16	340	CFE1816	DFE1816	19.00	0.75	0.70
20 X 6			DFE206	20.00	0.75	0.55
20 X 8			DFE208	20.00	0.75	0.60
20 x 10	310	CFE2010	DFE2010	20.00	0.80	0.68
20 x 12	345	CFE2012	DFE2012	20.00	0.80	0.75
20 x 14	355	CFE2014	DFE2014	20.00	0.80	0.66
20 x 16	390	CFE2016	DFE2016	20.00	0.80	0.70
20 x 18	410	CFE2018	DFE2018	20.00	0.80	0.75
24 x 8			DFE248	24.00	0.89	0.60
24 x 12	480	CFE2412	DFE2412	24.00	0.89	0.75
24 x 14	490	CFE2414	DFE2414	24.00	0.89	0.66
24 x 16	525	CFE2416	DFE2416	24.00	0.89	0.70
24 x 18	550	CFE2418	DFE2418	24.00	0.89	0.75
24 x 20	590	CFE2420	DFE2420	24.00	0.89	0.80
30 x 10			DFE3010	30.00	1.03	0.68
30 x 12			DFE3012	30.00	1.03	0.75
30 x 16			DFE3016	30.00	1.03	0.70
30 x 18	810	CFE3018	DFE3018	30.00	1.03	0.75
30 x 20	870	CFE3020	DFE3020	30.00	1.03	0.80
30 x 24	970	CFE3024	DFE3024	30.00	1.03	0.89
36 x 10			DFE3610	36.00	1.15	0.68
36 x 16			DFE3616	36.00	1.15	0.70
36 x 20	1,230	CFE3620	DFE3620	36.00	1.15	0.80
36 x 24	1,345	CFE3624	DFE3624	36.00	1.15	0.89
36 x 30	1,555	CFE3630	DFE3630	36.00	1.15	1.03
42 x 24	1,820	CFE4224	DFE4224	42.00	1.28	0.89
42 x 30	2,060	CFE4230	DFE4230	42.00	1.28	1.03
42 x 36	2,345	CFE4236	DFE4236	42.00	1.28	1.15
48 x 30	2,625	CFE4830	DFE4830	48.00	1.42	1.03
48 x 36	2,950	CFE4836	DFE4836	48.00	1.42	1.15
48 x 42	3,320	CFE4842	DFE4842	48.00	1.42	1.28
54 x 24			DFE5424	32.00	0.90	0.61
54 x 30			DFE5430	32.00	0.90	0.61
54 x 36			DFE5436	28.00	0.90	0.66
54 x 42			DFE5442	25.00	0.90	0.76
54 x 48			DFE5448	18.00	0.90	0.80
60 x 36			DFE6036	32.00	1.50	1.15
60 x 48			DFE6048	20.00	0.94	0.80



Eccentric Reducers

TRUE WYES

Size	Wt.	CAST IRON Item No.	DUCTILE IRON Item No.	A	B	T	T1
3x3	30	CFW33	DFW33	5.50	3.00	0.48	0.48
4x4	55	CFW44	DFW44	6.50	3.00	0.52	0.52
6x4	60	CFW64	DFW64	6.50	3.50	0.55	0.52
6x6	85	CFW66	DFW66	8.00	3.50	0.55	0.55
8x6	100	CFW86	DFW86	8.00	4.50	0.60	0.55
8x8	140	CFW88	DFW88	9.00	4.50	0.60	0.60
10 x 8	155	CFW108	DFW108	9.00	5.00	0.68	0.60
10 x 10	185	CFW1010	DFW1010	11.00	5.00	0.68	0.68
12 x 8	210	CFW128	DFW128	9.00	5.50	0.75	0.60
12 x 10			DFW1210	12.00	5.50	0.75	0.68
12 x 12	300	CFW1212	DFW1212	12.00	5.50	0.75	0.75
14 x 14	435	CFW1414	DFW1414	14.00	6.00	0.66	0.66
16 x 16	580	CFW1616	DFW1616	15.00	6.50	0.70	0.70
18 x 18	680	CFW1818	DFW1818	16.50	7.00	0.75	0.75
20 x 20	960	CFW2020	DFW2020	18.00	8.00	0.80	0.80
24 x 24	1,370	CFW2424	DFW2424	22.00	9.00	0.89	0.89
30 x 18	1,185	CFW3018	DFW3018	25.00	10.00	1.37	0.96
30 x 20	1,210	CFW3020	DFW3020	25.00	10.00	1.37	1.03
30 x 24	1,585	CFW3024	DFW3024	25.00	10.00	1.37	1.16
30 x 30	2,630	CFW3030	DFW3030	25.00	10.00	1.37	1.37
36 x 24	2,080	CFW3624	DFW3624	28.00	12.00	1.58	1.16
36 x 30	2,655	CFW3630	DFW3630	28.00	15.00	1.58	1.37
36 x 36	3,470	CFW3636	DFW3636	28.00	15.00	1.58	1.58
42 x 30	3,410	CFW4230	DFW4230	31.00	11.75	1.78	1.37
42 x 36	4,205	CFW4236	DFW4236	31.00	19.00	1.78	1.58
42 x 42	5,235	CFW4242	DFW4242	31.00	21.00	1.78	1.78
48 x 36	4,415	CFW4836	DFW4836	28.00	14.00	1.96	1.58
48 x 48	6,565	CFW4848	DFW4848	34.00	18.00	1.96	1.96



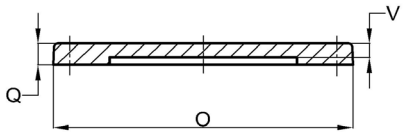
True Wyes

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

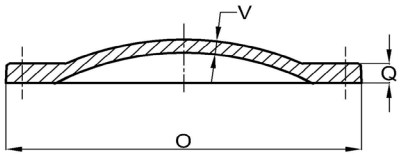
Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372

BLIND FLANGES

Size	Weight	CAST IRON		DUCTILE IRON		O	Q	V
		Soild	Trapped	Solid	Tapped			
2		BCF2		BDF2		6.00	0.62	0.31
2.5		BCF2.5		BDF25		7.00	0.69	0.48
3	9	BCF3	BTF3	BDF3	DTF3	7.50	0.75	0.69
4	14	BCF4	BTF4	BDF4	DTF4	9.00	0.94	0.88
6	24	BCF6	BTF6	BDF6	DTF6	11.00	1.00	0.94
8	38	BCF8	BTF8	BDF8	DTF8	13.50	1.12	1.06
10	59	BCF10	BTF10	BDF10	DTF10	16.00	1.19	1.12
12	76	BCF12	BTF12	BDF12	DTF12	19.00	1.25	0.81
14	110	BCF14	BTF14	BDF14	DTF14	21.00	1.38	0.88
16	145	BCF16	BTF16	BDF16	DTF16	23.50	1.44	1.00
18	185	BCF18	BTF18	BDF18	DTF18	25.00	1.56	1.06
20	217	BCF20	BTF20	BDF20	DTF20	27.50	1.69	1.12
24	370	BCF24	BTF24	BDF24	DTF24	32.00	1.88	1.25
30	500	BCF30	BTF30	BDF30	DTF30	38.75	2.12	1.44
36	790	BCF36	BTF36	BDF36	DTF36	46.00	2.38	1.62
42	1,175	BCF42	BTF42	BDF42	DTF42	53.00	2.62	1.81
48	1,585	BCF48	BTF48	BDF48	DTF48	59.50	2.75	2.00
54	2,600	BCF54	BTF54	BDF54	DTF54	66.25	3.00	0.90
60				BDF60		73.00	3.12	2.50
64				BDF64		80.00	3.38	2.56
72				BDF72		86.50	3.50	2.56
96				BDF96		113.25	4.25	3.20



Blind Flange Solid



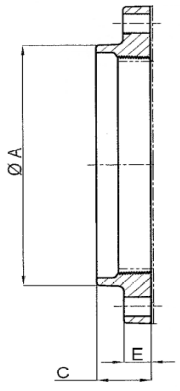
Blind Flange Tapped

SLUDGE SHOES

Size	Weight	Item No.	A Bolt Circle	Bolt Hole Diameter	B
3	25	CFS3	5.75	7/8	12.00
4	35	CFS4	6	7/8	12.00
6	45	CFS6	8	7/8	12.00
8	65	CFS8	10	7/8	12.00
10	85	CFS10	12.25	1.00	12.00
12	120	CFS12	14.5	1.00	12.00

THREADED FLANGES

Size	Wt.	Item No.	C	E	A	Item No.	Wt.	C	E	A
3	7	DF3	1.935	0.75	4.50	DF3-S	7.00	1.63	0.75	4.50
4	12	DF4	2.065	0.94	5.32	DF4-S	12.00	1.69	0.94	5.32
6	16.5	DF6	2.255	1.00	7.56	DF6-S	16.50	1.94	1.00	7.56
8	25	DF8	2.435	1.12	9.73	DF8-S	25.00	2.25	1.12	9.73
10	35	DF10	2.625	1.19	12.06	DF10-S	35.00	2.38	1.19	12.06
12	55	DF12	2.875	1.25	14.16	DF12-S	55.00	2.50	1.25	14.16
14	63	DF14	3.065	1.38	16.25	DF14-S	63.00	2.63	1.38	21.00
16	81	DF16	3.255	1.44	18.44	DF16-S	81.00	2.63	1.44	23.50
18	89	DF18	3.505	1.56	20.53	DF18-S	89.00	3.50	1.56	25.00
20	109	DF20	3.685	1.69	22.63	DF20-S	109.00	3.69	1.69	27.50
24	154	DF24	4.125	1.88	26.82	DF24-S	154.00	4.12	1.88	32.00
30	215	DF30	4.69	2.12	32.75	DF30-S	237.00	4.69	2.12	38.75
36	324	DF36	5.31	2.38	39.12	DF36-S	350.00	5.31	2.38	46.00
42	534	DF42	5.94	2.63	45.31	DF42-S	493.00	5.94	2.62	53.00
48	650	DF48	6.57	2.75	51.75	DF48-S	610.00	6.57	2.75	59.50
54	762	DF54	7.19	3.00	58.75	DF54-S	726.00	7.19	3.00	66.25
60	1,055	DF60	7.19	3.12	63.76	DF60-S		7.19	3.12	73.00
64	1,200	DF64	7.19	3.38	70.32	DF64-S				

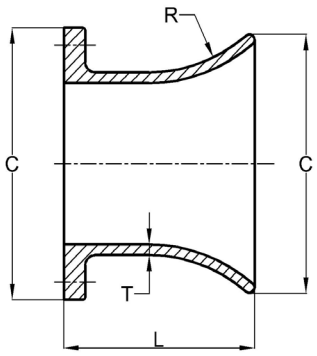


Threaded Flange

Note: Cast Iron fittings available upon request
Weights in Pounds, Less Accessories / Dimensions in inches

STRAIGHT FLARE PIECES

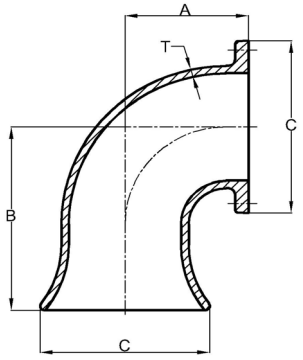
Size	Wt	CAST IRON Item No.	DUCTILE IRON Item No.	T	C	L	R
3	20	CFA3	DFA3	0.48	7.50	8.00	6.00
4	30	CFA4	DFA4	0.52	9.00	8.00	6.00
6	40	CFA6	DFA6	0.55	11.00	8.00	6.00
8	70	CFA8	DFA8	0.60	13.50	10.00	8.00
10	95	CFA10	DFA10	0.68	16.00	10.00	10.00
12	155	CFA12	DFA12	0.75	19.00	12.00	12.00
14	165	CFA14	DFA14	0.66	21.00	12.00	14.00
16	240	CFA16	DFA16	0.70	23.50	14.00	16.00
18	275	CFA18	DFA18	0.75	25.00	14.00	18.00
20	355	CFA20	DFA20	0.80	27.50	13.00	20.00
24	480	CFA24	DFA24	0.89	32.00	16.00	24.00
30	1,100	CFA30	DFA30	1.03	38.75	15.00	30.00
36	1,460	CFA36	DFA36	1.15	46.00	14.00	36.00
42	1,750	CFA42	DFA42	1.28	53.00	12.00	42.00
48	2,375	CFA48	DFA48	1.42	59.50	18.00	48.00



Straight Flare Pieces

90 DEGREE FLARE BENDS

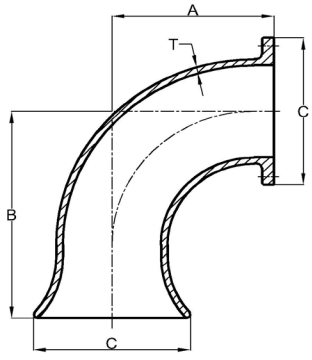
Size	Wt	CAST IRON Item No.	DUCTILE IRON Item No.	T	C	A	B
3	30	CFF390	DFF390	0.48	7.50	5.50	11.00
4	45	CFF490	DFF490	0.52	9.00	6.50	12.00
6	75	CFF690	DFF690	0.55	11.00	8.00	12.00
8	120	CFF890	DFF890	0.60	13.50	9.00	14.00
10	195	CFF1090	DFF1090	0.68	16.00	11.00	17.00
12	275	CFF1290	DFF1290	0.75	19.00	12.00	18.00
14	310	CFF1490	DFF1490	0.66	21.00	14.00	21.50
16	395	CFF1690	DFF1690	0.70	23.50	15.00	23.00
18	495	CFF1890	DFF1890	0.75	25.00	16.50	25.00
20	630	CFF2090	DFF2090	0.80	27.50	18.00	27.00
24	995	CFF2490	DFF2490	0.89	32.00	22.00	32.50
30	1,970	CFF3090	DFF3090	1.03	38.75	25.00	36.00
36	2,730	CFF3690	DFF3690	1.15	46.00	28.00	38.00
42	3,200	CFF4290	DFF4290	1.28	53.00	31.00	35.00
48	5,235	CFF4890	DFF4890	1.42	59.50	34.00	46.00
54			DFF5490	0.90	66.25	39.00	47.50
60			DFF6090	0.94	73.00	43.00	54.00



90 Degree Flare Bends

90 DEGREE FLARE LONG RADIUS BENDS

Size	Wt	CAST IRON Item No.	DUCTILE IRON Item No.	T	C	A	B
4	50	CFG490	DFG490	0.52	9.00	9.00	14.50
6	90	CFG690	DFG690	0.55	11.00	11.50	15.50
8	155	CFG890	DFG890	0.60	13.50	14.00	19.00
10	250	CFG1090	DFG1090	0.68	16.00	16.50	22.50
12	375	CFG1290	DFG1290	0.75	19.00	19.00	25.00
14	400	CFG1490	DFG1490	0.66	21.00	21.50	29.00
16	530	CFG1690	DFG1690	0.70	23.50	24.00	32.00
18	675	CFG1890	DFG1890	0.75	25.00	26.50	35.00
20	865	CFG2090	DFG2090	0.80	27.50	29.00	38.00
24	1,335	CFG2490	DFG2490	0.89	32.00	34.00	44.50
30	2,190	CFG3090	DFG3090	1.03	38.75	41.50	48.50
36	3,465	CFG3690	DFG3690	1.15	46.00	49.00	56.00
42	5,150	CFG4290	DFG4290	1.28	53.00	56.50	63.50
48	6,725	CFG4890	DFG4890	1.42	59.50	64.00	71.00



90 Degree Flare Long Radius Bends

Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372

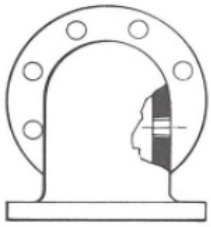
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FM APPROVED

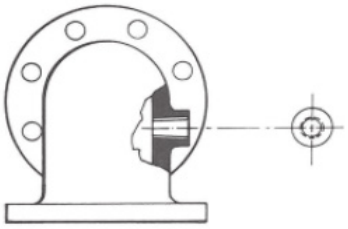
AWWA MEMBER

BOSS AND TAP LOCATIONS

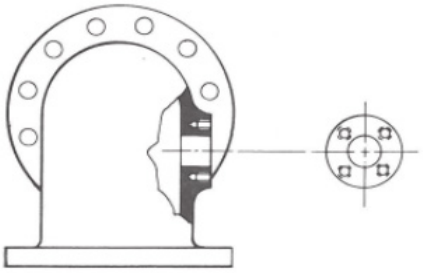
METHOD OF DESIGNATING LOCATION OF TAPPED HOLES
AND/OR BOSSES IN CAST IRON FLANGED FITTINGS



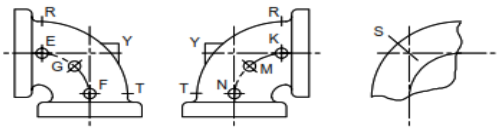
TAPPED HOLE THROUGH WALL



REGULAR BOSS WITH PIPE TAP

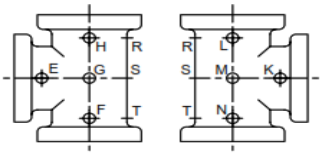


FLANGE BOSS WITH BLIND TAPPED HOLES

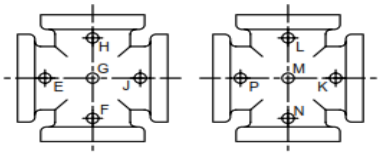


90 deg. Elbow
Straight Size

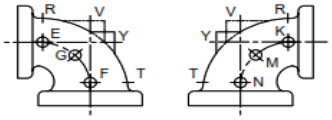
90 deg. Elbow



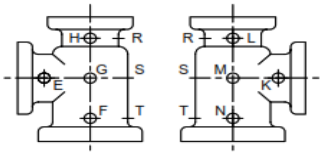
Tee
Straight Size



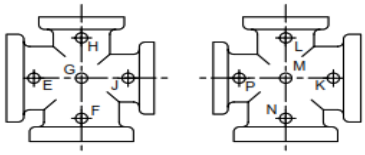
Cross
Straight Size



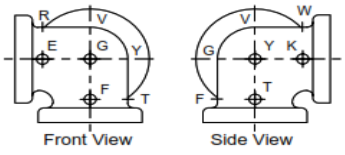
90 deg. Elbow
Reducing Size



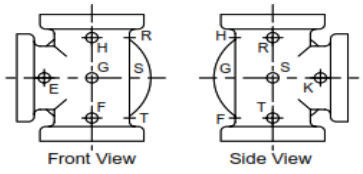
Tee
Reducing Size



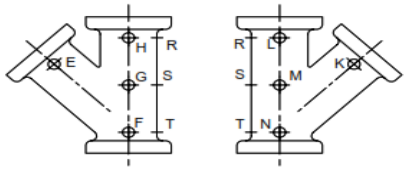
Cross
Reducing Size



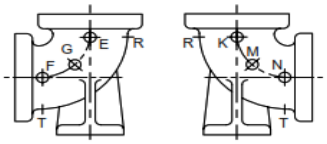
Side Outlet 90 deg. Elbow
Straight Size



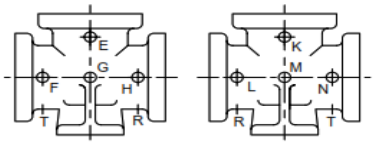
Side Outlet Tee
Straight Size



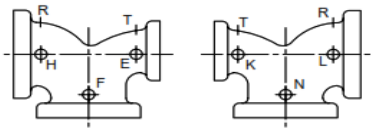
45 Deg. Lateral
Straight and Reducing



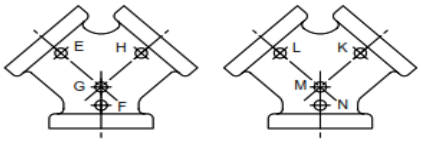
90 Deg. Base Elbow
Straight and Reducing



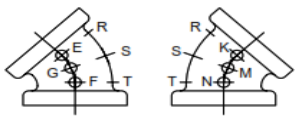
Base Tee



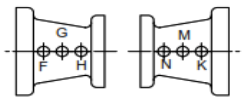
Double Branch Elbow



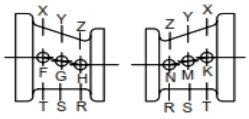
True Y



45 Deg. Elbow



Reducer



Eccentric Reducer

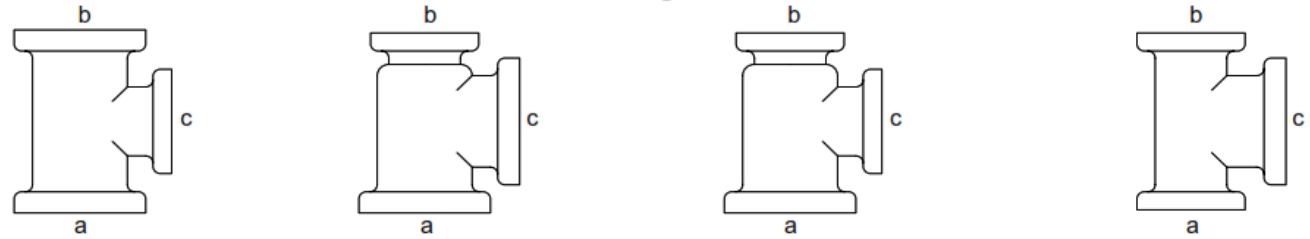
The illustrations show two views of the same fitting and represent fittings with symmetrical shapes, with the exception of the side outlet elbow and the side outlet tee.

When a cast iron flanged fitting is wanted with a tapped connection, give the size of the tapping required, and designate its location by means of a letter selected from the correct view of the fitting in question.

DESIGNATION OF OUTLETS

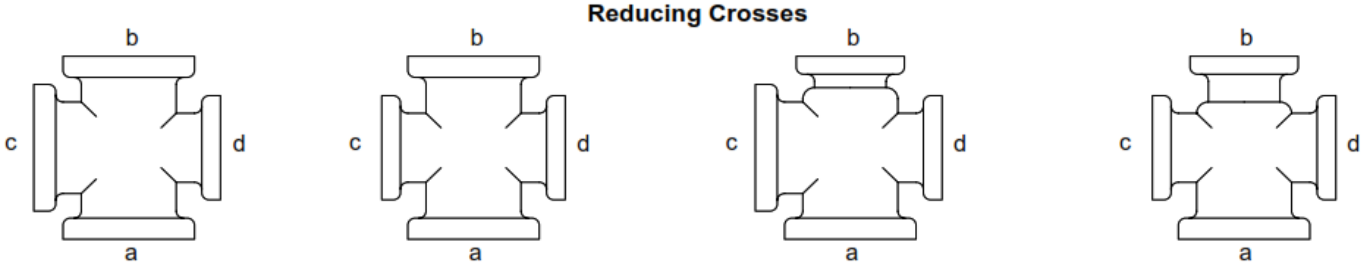
METHOD OF DESIGNATING OUTLETS OF REDUCING FITTINGS FOR SPECIFICATIONS

Reducing Tees



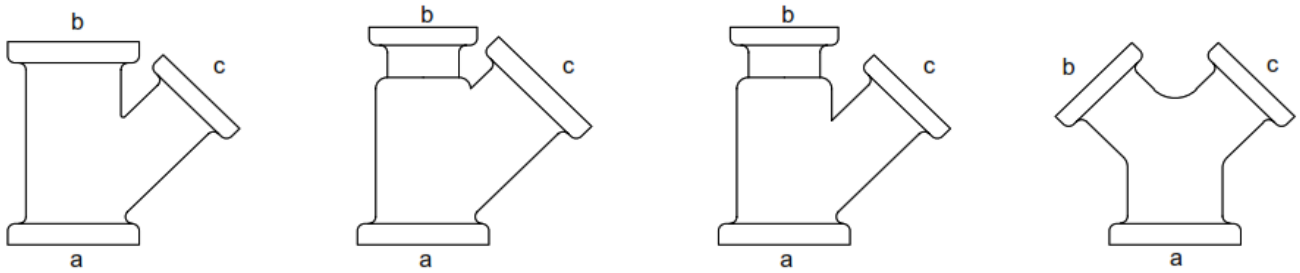
Reducing on Outlet | Reducing on One Run | Reducing on One Run and Outlet | Reducing on Both Runs (Bull Head)

Reducing Crosses



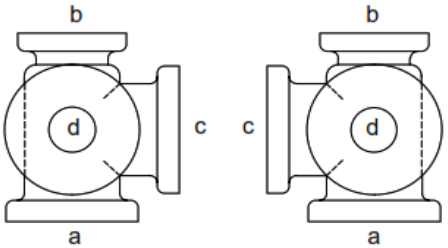
Reducing on One Outlet | Reducing on Both Outlets | Reducing on One Run and Outlet | Reducing on One Run and Both Outlets

Reducing Laterals



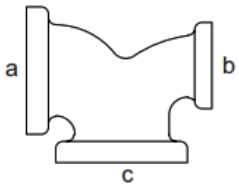
Reducing on Branch | Reducing on One Run | Reducing on One Run and Branch | True Y

Side Outlet Tee

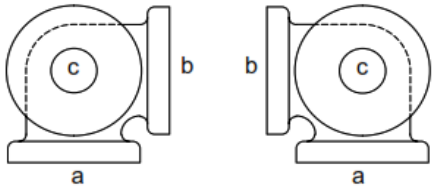


Right Hand | Left Hand

Double Branch Elbow



Side Outlet 90 deg. Elbow



Right Hand | Left Hand

The largest opening establishes the basic size of a reducing fitting. The largest opening is named first, except for bull head tees which are reducing on both runs and double branch elbows where both branches are reducing; the outlet is the largest opening and named last in both cases.

In designating the opening of reducing fittings, they should be read in order indicated by the sequence of the letters a, b, c and d. In designating the outlets of side outlet of side outlet reducing fittings, the side outlet is named last; and in the case of the cross which is not shown, the side outlet is designated by the letter e.

C110 Flanged Fittings Non-Standard Items:

C110 Flanged Fittings Non-Standard Items:

•Item #	Description
•**DFB105**	C110 DI 10" X 5" FLG X FLG 5-5/8 DEGREE BEND
•**DFB2430**	C110 DI 24" X 30" FLG X FLG 30 DEGREE BEND
•**DFB2460**	C110 DI 24" X 24" FLG X FLG 60 DEGREE BEND
•**DFB4180**	C110 DI 4" X 4" FLG X FLG 180 DEGREE RETURN BEND
•**DFB54**	C110 DI 5" X 4" FLG X FLG REDUCING BEND
•**DFB6180**	C110 DI 6" X 6" FLG X FLG 180 DEGREE RETURN BEND
•**DFB8180**	C110 DI 8" X 8" FLG X FLG 180 DEGREE RETURN BEND
•**DFB83**	C110 DI 8" X 3" FLG X FLG REDUCING BEND
•**DFC3610**	C110 DI 36" X 10" FLG X FLG CROSS
•**DFC8886**	C110 DI 8" X 8" X 8" X 6" FLG X FLG X FLG X FLG CR
•**DFL124**	C110 DI 12" X 4" FLG X FLG REDUCING LR BEND
•**DFL1445**	C110 DI 14" FLG x FLG 45 DEGREE LR BEND
•**DFL1645**	C110 DI 16" FLG x FLG 45 DEGREE LR BEND
•**DFL1845**	C110 DI 18" FLG x FLG 45 DEGREE LR BEND
•**DFL2045**	C110 DI 20" FLG x FLG 45 DEGREE LR BEND
•**DFL2445**	C110 DI 24" FLG x FLG 45 DEGREE LR BEND
•**DFL311**	C110 DI 3" FLG x FLG 11-1/4 DEGREE LR BEND
•**DFL54**	C110 DI 5" X 4" FLG X FLG REDUCING LR BEND
•**DFL65**	C110 DI 6" X 5" FLG X FLG REDUCING LR BEND
•**DFL85**	C110 DI 8" X 5" FLG X FLG REDUCING LR BEND
•**DFT2525**	C110 DI 2.5" X 2.5" FLG X FLG TEE
•**DFT3010**	C110 DI 30" X 10" FLG X FLG TEE
•**DFT306**	C110 DI 30" X 6" FLG X FLG TEE
•**DFT308**	C110 DI 30" X 8" FLG X FLG TEE
•**DFT343**	C110 DI 3" X 4" X 3" FLG X FLG X FLG TEE
•**DFT3610**	C110 DI 36" X 10" FLG X FLG TEE
•**DFT52**	C110 DI 5" X 2" FLG X FLG TEE
•**DFT53**	C110 DI 5" X 3" FLG X FLG TEE
•**DFT54**	C110 DI 5" X 4" FLG X FLG TEE
•**DFT544**	C110 DI 5" X 4" X 4" FLG X FLG X FLG TEE
•**DFT643**	C110 DI 6" X 4" X 3" FLG X FLG X FLG TEE
•**DFT644**	C110 DI 6" X 4" X 4" FLG X FLG X FLG TEE
•**DFT646**	C110 DI 6" X 4" X 6" FLG X FLG X FLG TEE
•**DFT65**	C110 DI 6" X 5" FLG X FLG TEE
•**DFT85**	C110 DI 8" X 5" FLG X FLG TEE
•**DFD128**	C110 DI 12" X 8" FLG X FLG 90 DEGREE BASE BEND
•**DFD1816**	C110 DI 18" X 16" FLG X FLG 90 DEGREE BASE BEND
•**DFD2012**	C110 DI 20" X 12" FLG X FLG 90 DEGREE BASE BEND
•**DFD2016**	C110 DI 20" X 16" FLG X FLG 90 DEGREE BASE BEND
•**DFD2412**	C110 DI 24" X 12" FLG X FLG 90 DEGREE BASE BEND
•**DFD2416**	C110 DI 24" X 16" FLG X FLG 90 DEGREE BASE BEND
•**DFD2418**	C110 DI 24" X 18" FLG X FLG 90 DEGREE BASE BEND
•**DFD3018**	C110 DI 30" X 18" FLG X FLG 90 DEGREE BASE BEND
•**DFD3020**	C110 DI 30" X 20" FLG X FLG 90 DEGREE BASE BEND

Note: Contact SIGMA Waterworks for more information on non-standard fittings

SIGMA WATERWORKS

LOCATIONS

Northeast Region
Cream Ridge, New Jersey (HQ)
700 Goldman Drive
Cream Ridge, NJ 08514
Phone (800) 999-2550
crmcsr@sigmawaterworks.com

Midwest Region
Sauk Village, Illinois
21699 Torrence Avenue
Sauk Village, IL 60411
Phone (888) 999-0420
chicsr@sigmawaterworks.com

Denver, Colorado
22700 I-76 Frontage Rd
Brighton, CO 80603
Phone (888) 999-0420
dbrugger@sigmawaterworks.com

Southeast Region
Alexander City, Alabama
1500 Highway 22 W
Alexander City, AL 35010
Phone (800) 824-4513
alxcsr@sigmawaterworks.com

Southwest Region
Houston, Texas
5000 Askins Lane
Houston, TX 77093
Phone (800) 999-0109
htncsr@sigmawaterworks.com

Western Region
Ontario, California
4652 E. Guasti Road
Ontario, CA 91761
Phone (800) 688-6230
ontcsr@sigmawaterworks.com

Auburn, Washington (Branch)
902 W Main Street
Auburn, WA 98001
Phone (800) 688-6230
ontcsr@sigmawaterworks.com

SIGMA-Edmonton
26224 Highway 37
Sturgeon County, Alberta T8T 0H3
Phone (780) 458-9676
pbrunelle@sigmawaterworks.com

REPCO
51 Rue Gingras
Warwick, QC J0A 1M0
Phone (888) 744-6262
jboucher@repco.ca

Concord Supply
2353 Bowman Street
Innisfil, Ontario L9S 3V6
Phone (877) 436-3800
tanya@concordsupply.ca

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- 2-64” C153 Ductile Iron Mechanical Joint Fittings
- 2-48” C110 Ductile Iron Mechanical Joint Fittings
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- 3-24” C153 Ductile Iron Push-On Fittings
- 4-24” C110 Ductile Iron Push-On Fittings
- 3-36” Ductile Iron Mechanical Joint Connector
- C116 Fusion Bonded Epoxy Lining Available
- PROTECTO 401® Ceramic Epoxy Lining Available

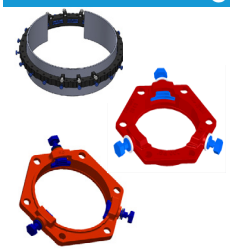
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Mechanical Joint Accessories



- Prepackaged and Loose Mechanical Joint Accessories
- SIGMASEAL™ Improved Mechanical Joint Gasket
- Snap-On Multi-Purpose Gasket for Ductile Iron or PVC Pressure Pipes
- OMNI-SLEEVE™ Improved Wall Penetration Sleeve
- Specialty Bolts and Nuts for Mechanical Joint Assemblies

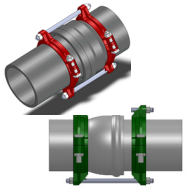
ONE-LOK™ Wedge Action Restraints



- 3-48” ONE-LOK™ D-SLDE Domestic Wedge Restraint for Ductile Iron Pipe
- 3-64” ONE-LOK™ SLDE Wedge Restraint for Ductile Iron Pipe (Import)
- 4-48” ONE-LOK™ T-SLDE Tandem Wedge Restraint for High Pressure Ductile Iron Pipe
- 3-36” ONE-LOK™ D-SLCE Domestic Wedge Restraint for PVC Pipe
- 3-12” ONE-LOK™ SLC Wedge Restraint for PVC Pipe (Import)
- 3-60” ONE-LOK™ SLCE Wedge Restraint for PVC Pipe (Import)
- 3-42” ONE-LOK™ SLDEH Wedge Harness Restraint for Ductile Iron Pipe
- 4-12” /16” /20” ONE-LOK™ SLDM Wedge Restraint for Oversized Cast Iron Pipe
- 4-48” ONE-LOK SSLD™ Split Wedge Restraint for Installed Ductile Iron Pipe & Fitting
- 4-36” ONE-LOK SSLDH™ Split Wedge Harness Restraint for Installed Ductile Iron Pipe
- 4-12” ONE-LOK SLCEH™ Wedge Harness Restraint for AWWA C900 PVC Pipe

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PV-LOK™ Serration Lock Restraints



- 4-48” PV-LOK™ PWM Serrated Restraint for Ductile Iron Fitting & AWWA C900/905 PVC Pipe
- 4-48” PV-LOK™ PWP Serrated Bell Joint Restraint for AWWA C900/905 PVC Pipe
- 4-12” PV-LOK™ D-PWP Domestic Serrated Bell Joint Restraint for AWWA C900 PVC Pipe
- 4-12” PV-LOK™ PWPF Restraint for AWWA C900/905 PVC Pipe & PVC Fitting
- 4-12” PV-LOK™ PWH Serrated Harness Restraint for AWWA C900 PVC Pipe
- 2-12” PV-LOK™ PVM Serrated Restraint for Ductile Iron & IPS OD PVC pipe
- 2-12” PV-LOK™ PVP Serrated Bell Joint Restraint for IPS OD PVC Pipe
- 2-8” PV-LOK™ PVPF Serrated Restraint for IPS OD PVC Pipe & PVC Fitting
- 4-12” PV-LOK™ PWP Serrated Bell Joint Restraint for Ductile Iron Pipe

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- Storm Inlets
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Fabricator Products



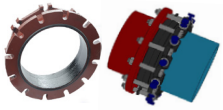
- 3-64” High Hub Threaded Flanges
- 3-48” Tapped High Hub Threaded Flanges
- 3-36” Extra Heavy 250lb Drilled Threaded Flanges
- 3-48” Threaded MJ Bell Adapters
- 3-48” MJ x PE Bell adapter
- 3-48” Anchor Flanges
- 3-16” Filler Flanges

Field Essentials



- Flange-Pak™ Prepackaged Flange Accessory Sets
- Polyethylene Encasement for Ductile Iron Pipe
- Copper Tubing Products
- Tracer Wire & Detectable/Non-Detectable Marking Tape
- Pipe Joint Lubricant & Hydraulic Cement
- Socket Clamps and Tie Rod Accessories
- Boxlok Valve Box Alignment Device
- Cast Iron Companion Flanges

Flange Adapters



- 3-36” SIGMAFLANGE Flange Adapter Sleeve for PVC and Ductile Iron Pipe
- 2-12” ZIP FLANGE Set Screw Style Flange Adapter
- 3-36” SIGMAFLANGE Universal Joint for Flanged Fittings, Flanged Pipes & Valves

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