

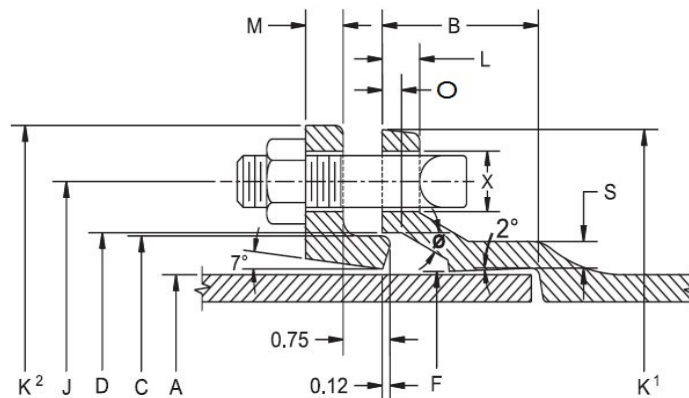
☐ DOMESTIC

☐ NON-DOMESTIC

SUBMITTAL: C110 MECHANICAL JOINT PRODUCT

(Current revisions for the noted Standards apply)

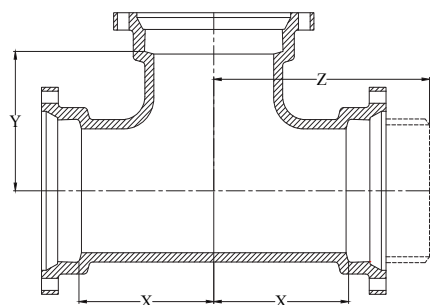
SIZES:	2" - 48"
STANDARDS:	ANSI/AWWA C110/A21.10, NFPA 13/24, 3" - 12" UL listed and approved (File - Tyler Union)
MATERIAL:	Cast of ASTM A536 qualified ductile iron. Date code is cast on and required for traceability.
PRESSURE RATING:	*Flanged fittings rated at 250 psi. Mechanical joints 2" - 24" rated at 350 psi and 30" - 48" at 250 psi. *Note: With rubber annular ring flange gasket, 2" - 24" Flanged fittings can be rated at 350 psi. Note: Wyes over 12" are not pressure rated. Contact Tyler Union for rating in your application.
DEFLECTION:	Joint deflection 5° max for 2"- 12" and 3° max for 14"- 48". Reduces by 50% at nominal pipe & fitting diameters
NSF-61 & NSF372:	Meets all requirements including Annex G, Tyler Union's Underwriters Laboratory listing MH16439.
ASPHALT COATING:	Per ANSI/AWWA C104/A21.4 and ANSI/AWWA C110/A21.10.
CEMENT LINING:	Per ANSI/AWWA C104/A21.4, with double cement lining available upon request.
EPOXY COATING:	Fusion bonded epoxy per ANSI/AWWA C116/A21.16. Additional coatings available upon request.
BARE FITTINGS:	Available upon request.
FASTNERS:	High strength low alloy weathering steel per ANSI/AWWA C111/A21.11 and ASTM A242
INSTALLATION:	Install per AWWA C600/C651 using pipe conforming to ANSI/AWWA C151/A21.51 or AWWA C900/905.



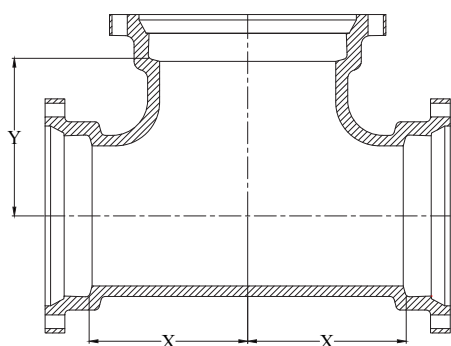
NOMINAL JOINT DIMENSIONS IN INCHES

Size Inches	A Dia. DI Pipe	B Hub Depth	C Dia. GLAND	D Dia.	F Dia.	Ø	X	J Dia. GLAND	K ¹ Dia.	K ² Dia. GLAND	L	M GLAND	O	S	Qty. BOLTS
2	2.51	2.50	3.39	3.50	2.61	28°	3/4	4.75	6.25	6.25	0.73	0.62	0.31	0.44	2
3	3.96	2.50	4.84	4.94	4.06	28°	3/4	6.19	7.69	7.69	0.94	0.62	0.31	0.52	4
4	4.80	2.50	5.92	6.02	4.90	28°	7/8	7.50	9.12	9.12	1.00	0.75	0.31	0.65	4
6	6.90	2.50	8.02	8.12	7.00	28°	7/8	9.50	11.12	11.12	1.06	0.88	0.31	0.70	6
8	9.05	2.50	10.17	10.27	9.15	28°	7/8	11.75	13.37	13.37	1.12	1.00	0.31	0.75	6
10	11.10	2.50	12.22	12.34	11.20	28°	7/8	14.00	15.69	15.62	1.19	1.00	0.31	0.80	8
12	13.20	2.50	14.32	14.44	13.30	28°	7/8	16.25	17.94	17.88	1.25	1.00	0.31	0.85	8
14	15.30	3.50	16.40	16.54	15.44	28°	7/8	18.75	20.31	20.25	1.31	1.25	0.31	0.89	10
16	17.40	3.50	18.50	18.64	17.54	28°	7/8	21.00	22.56	22.50	1.38	1.31	0.31	0.97	12
18	19.50	3.50	20.60	20.74	19.64	28°	7/8	23.25	24.83	24.75	1.44	1.38	0.31	1.05	12
20	21.60	3.50	22.70	22.84	21.74	28°	7/8	25.50	27.08	27.00	1.56	1.44	0.31	1.12	14
24	25.80	3.50	26.90	27.04	25.94	28°	7/8	30.00	31.58	31.50	1.62	1.56	0.31	1.22	16
30	32.00	4.00	33.29	33.46	32.17	20°	1-1/8	36.88	39.12	39.12	1.81	2.00	0.38	1.50	20
36	38.30	4.00	39.59	39.76	38.47	20°	1-1/8	43.75	46.00	46.00	2.00	2.00	0.38	1.80	24
42	44.50	4.00	45.79	45.96	44.67	20°	1-3/8	50.62	53.12	53.12	2.00	2.00	0.38	1.95	28
48	50.80	4.00	52.09	52.26	50.97	20°	1-3/8	57.50	60.00	60.00	2.00	2.00	0.38	2.20	32

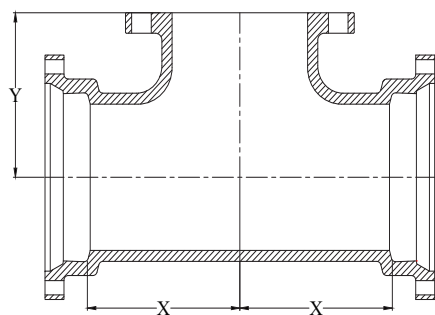
C110 DUCTILE IRON FULL BODY FITTINGS



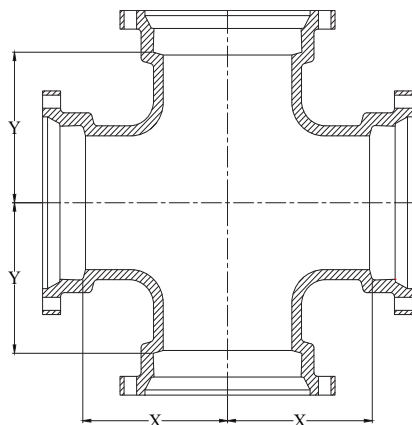
MJ Tees and MJxPExMJ Tees



MJ Bullhead Tees



MJxFE Tees



Cross

TEES AND CROSSES

Size Run	Branch	X	Y	Z	MJ	Weight		
						MJxPExMJ	MJxMJxFE	Cross
2	2	3.25	3.25	—	21	—	—	—
3	2	3.25	3.25	—	45	—	—	—
3	3	5.50	5.50	13.50	58	—	—	—
4	2	4.80	4.80	14.50	68	—	49	—
4	3	6.50	6.50	14.50	77	—	—	—
4	4	6.50	6.50	14.50	78	75	76	—
4	6	8.00	8.00	—	112	—	—	—
6	2	8.00	8.00	—	78	—	—	—
6	3	8.00	8.00	16.00	98	—	—	—
6	4	8.00	8.00	16.00	110	—	109	—
6	6	8.00	8.00	16.00	119	120	141	160
6	8	9.00	9.00	—	158	—	—	—
8	3	9.00	9.00	17.00	155	—	—	—
8	4	9.00	9.00	17.00	157	—	150	185
8	6	9.00	9.00	17.00	175	170	182	205
8	8	9.00	9.00	17.00	199	180	194	255
10	4	11.00	11.00	19.00	—	—	229	—
10	6	11.00	11.00	19.00	258	—	264	285
10	8	11.00	11.00	19.00	268	—	245	310
10	10	11.00	11.00	19.00	300	250	—	380
12	4	12.00	12.00	20.00	318	315	323	—
12	6	12.00	12.00	20.00	325	325	335	360
12	8	12.00	12.00	20.00	335	335	372	371
12	10	12.00	12.00	20.00	392	390	—	486
12	12	12.00	12.00	20.00	396	396	476	—
14	12	14.00	14.00	22.00	540	560	—	—
14	14	14.00	14.00	22.00	585	570	—	779
16	4	15.00	15.00	23.00	580	580	575	—
16	6	15.00	15.00	23.00	615	590	605	650
16	8	15.00	15.00	23.00	625	605	615	675
16	10	15.00	15.00	23.00	645	620	—	—
16	12	15.00	15.00	23.00	627	640	651	—
16	16	15.00	15.00	23.00	740	720	730	895
18	6	13.00	15.50	—	710	—	707	—
18	8	13.00	15.50	—	659	—	675	775
18	12	13.00	15.50	—	749	—	733	860
18	18	16.50	16.50	—	945	—	953	1140
20	6	14.00	17.00	—	849	—	—	—
20	8	14.00	17.00	—	892	—	859	951
20	12	14.00	17.00	—	896	—	—	977
20	16	18.00	18.00	—	1095	—	—	1245
20	20	18.00	18.00	—	1258	—	1168	1440
24	6	15.00	19.00	—	1233	—	1228	—
24	8	15.00	19.00	—	1234	—	1242	1244
24	12	15.00	19.00	—	1256	—	1165	1326
24	14	15.00	19.00	—	1220	—	—	—
24	16	15.00	19.00	—	1245	—	—	1479
24	18	22.00	22.00	—	1735	—	—	—
24	20	22.00	22.00	—	1720	—	1795	1965
24	24	22.00	22.00	—	1947	—	—	2192
30	6	18.00	23.00	—	2050	—	—	2085
30	8	18.00	23.00	—	2060	—	—	—
30	10	18.00	23.00	—	2075	—	—	—
30	12	18.00	23.00	—	2090	—	—	2165
30	16	18.00	23.00	—	2145	—	—	—
30	18	18.00	23.00	—	2170	—	—	—
30	20	18.00	23.00	—	2205	—	—	—
30	24	25.00	25.00	—	2880	—	3080	3180
30	30	25.00	25.00	—	2275	—	2430	3640

Tyler Union does not recommend the use of wedge action restraints on plain end fittings