



DUCTILE IRON C110 FULL BODY MECHANICAL JOINT DIMENSIONS

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

SAMPLE SPECIFICATION (Current ANSI/AWWA revision apply)

Mechanical joint watermain fittings with accessories, 2" through 48" shall be produced of ductile iron in accordance with and meet all applicable terms and provisions of standards ANSI/AWWA C110/A21.10 and ANSI/AWWA C111/A21.11. Ductile iron mechanical joint fittings 3" through 24" shall be rated for 350 PSI working pressure. All ductile iron mechanical joint fittings 30" through 48" shall be rated for 250 PSI working pressure. Flanged ductile-iron fittings in 24-in. (610mm) and smaller sizes may be rated for 350 psi (2,413 kPa) with the use of special (annular ring or comparable) gaskets.

NOTE - EXCEPTIONS: Mechanical Joint Fittings with flanged branches and 14" and larger caps and plugs are rated for water pressure of 250 PSI.

NOTE - Installation per AWWA C600 and AWWA C651, current revision

NOTE: Fittings are cement lined and seal coated in accordance with ANSI/AWWA C104/A21.4. Fittings are also available double cement lined, bare or epoxy coated. Coated and lined fittings meet requirements of NSF-61, NSF-372, & Annex G..

NOMINAL JOINT DIMENSIONS IN INCHES - MECHANICAL JOINT FITTINGS

DIMENSIONS IN INCHES

Size	A	B	C	D	F	1/3	X	J	K ¹	K ²	L	M	N	O	P	S
*2	2.50	2.50	3.39	3.50	2.61	28°	3/4	4.75	6.25	6.25	.75	.62	1.12	.31	.63	.44
3	3.96	2.50	4.84	4.94	4.06	28°	3/4	6.19	7.69	7.69	.94	.62	1.37	.31	.63	.52
4	4.80	2.50	5.92	6.02	4.90	28°	7/8	7.50	9.12	9.12	1.00	.75	1.50	.31	.75	.65
6	6.90	2.50	8.02	8.12	7.00	28°	7/8	9.50	11.12	11.12	1.06	.88	1.63	.31	.75	.70
8	9.05	2.50	10.17	10.27	9.15	28°	7/8	11.75	13.37	13.37	1.12	1.00	1.75	.31	.75	.75
10	11.10	2.50	12.22	12.34	11.20	28°	7/8	14.00	15.69	15.62	1.19	1.00	1.75	.31	.75	.80
12	13.20	2.50	14.32	14.44	13.30	28°	7/8	16.25	17.94	17.88	1.25	1.00	1.75	.31	.75	.85
14	15.30	3.50	16.40	16.54	15.44	28°	7/8	18.75	20.31	20.25	1.31	1.25	2.00	.31	.75	.89
16	17.40	3.50	18.50	18.64	17.54	28°	7/8	21.00	22.56	22.50	1.38	1.31	2.06	.31	.75	.97
18	19.50	3.50	20.60	20.74	19.64	28°	7/8	23.25	24.83	24.75	1.44	1.38	2.13	.31	.75	1.05
20	21.60	3.50	22.70	22.84	21.74	28°	7/8	25.50	27.08	27.00	1.50	1.44	2.19	.31	.75	1.12
24	25.80	3.50	26.90	27.04	25.94	28°	7/8	30.00	31.58	31.50	1.62	1.56	2.31	.31	.75	1.22
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	2.75	.38	1.00	1.50
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	2.75	.38	1.00	1.80
42	44.50	4.00	45.79	45.96	44.67	20°	1 1/8	50.62	53.12	53.12	2.00	2.00	2.75	.38	1.00	1.95
48	50.80	4.00	52.09	52.26	50.97	20°	1 1/8	57.50	60.00	60.00	2.00	2.00	2.75	.38	1.00	2.20

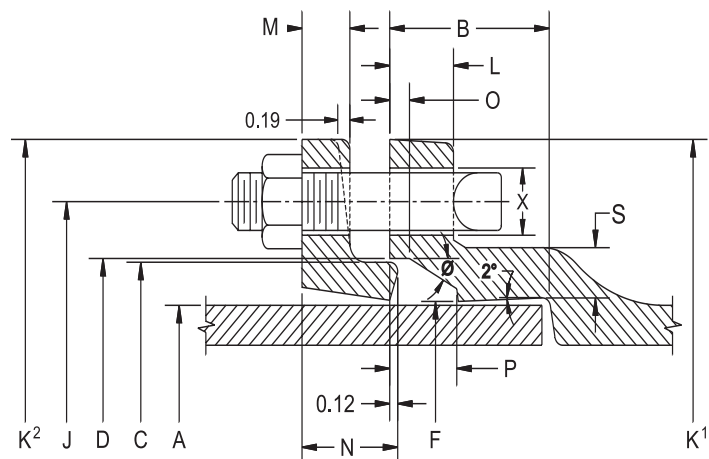
* Not included in AWWA C110.

ACCESSORIES AND WEIGHTS

Size	No.	Bolt Size	Bolt Length	Bolt Torque Ft/Lbs.	Wt. of Gland, Bolts and Gasket, Lbs.	Pipe Barrel O.D.
*2	2	5/8	3	45-60	5	2.50
3	4	5/8	3	45-60	7	3.96
4	4	3/4	3 1/2	75-90	10	4.80
6	6	3/4	3 1/2	75-90	16	6.90
8	6	3/4	4	75-90	25	9.05
10	8	3/4	4	75-90	30	11.10
12	8	3/4	4	75-90	40	13.20
14	10	3/4	4 1/2	75-90	45	15.30
16	12	3/4	4 1/2	75-90	55	17.40
18	12	3/4	4 1/2	75-90	65	19.50
20	14	3/4	4 1/2	75-90	85	21.60
24	16	3/4	5	75-90	105	25.80
30	20	1	6	100-120	220	32.00
36	24	1	6	100-120	301	38.30
42	28	1 1/4	6 1/2	120-150	389	44.50
48	32	1 1/4	6 1/2	120-150	477	50.80

* Not included in AWWA C110.

14" THRU 48"
GLANDS MAY
BE TAPERED

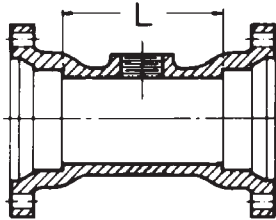


ANSI/AWWA C110/A21.10, ANSI/AWWA C111/A21.11



DUCTILE IRON C110 FULL BODY MECHANICAL JOINT FITTINGS

MJ TAPPED TEE

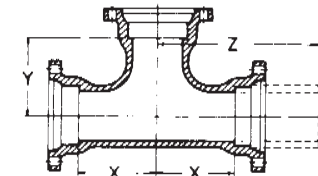


MJ Tapped Tee (2"Tap)

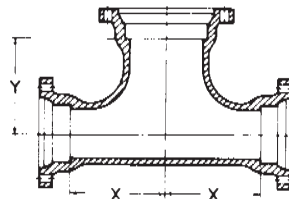
Size	Dimensions		Weights
	L	Max. Tap	
3	8	2	40
4	8	2	51
6	8	2	73
8	8	2	104
10	8	2	130
12	8	2	180

For sizes not found in this section check MJ-SSB DI fittings, pages 3 thru 11.

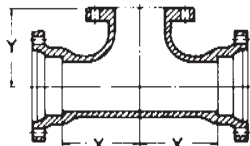
TEES



**Straight Tees and
Reducing on Branch Tees**



Bullhead



MJxMJxFE

Run	Size		Dimensions			Weights		
	Run	Branch	X	Y	Z	MJ	**MJxPExMJ	**MJxMJxFE
*2	2	2	3.25	3.25	...	21	...	...
*3	3	2	3.25	3.25	...	45	...	...
3	3	3	5.5	5.5	13.5	58	...	...
*4	4	2	4.8	4.8	14.5	68	...	49
4	4	3	6.5	6.5	14.5	77	...	...
4	4	4	6.5	6.5	14.5	78	75	76
4	4	6	8.0	8.0	...	112	...	...
*6	6	2	8.0	8.0	...	78	...	...
6	6	3	8.0	8.0	16.0	112	...	...
6	6	4	8.0	8.0	16.0	110	...	109
6	6	6	8.0	8.0	16.0	119	120	141
6	6	8	9.0	9.0	...	158	...	...
8	8	3	9.0	9.0	17.0	155	...	...
8	8	4	9.0	9.0	17.0	157	...	150
8	8	6	9.0	9.0	17.0	175	170	182
8	8	8	9.0	9.0	17.0	199	180	194
10	10	4	11.0	11.0	19.0	...	...	229
10	10	6	11.0	11.0	19.0	258	...	264
10	10	8	11.0	11.0	19.0	268	...	245
10	10	10	11.0	11.0	19.0	300	250	...
12	12	4	12.0	12.0	20.0	318	315	323
12	12	6	12.0	12.0	20.0	325	325	335
12	12	8	12.0	12.0	20.0	335	335	372
12	12	10	12.0	12.0	20.0	392	390	...
12	12	12	12.0	12.0	20.0	396	396	476
14	14	12	14.0	14.0	22.0	540	560	...
14	14	14	14.0	14.0	22.0	585	570	...
*16	16	4	15.0	15.0	23.0	600	580	575
16	16	6	15.0	15.0	23.0	615	590	605
16	16	8	15.0	15.0	23.0	625	605	615
16	16	10	15.0	15.0	23.0	645	620	...
16	16	12	15.0	15.0	23.0	660	640	651
16	16	16	15.0	15.0	23.0	740	720	730

NOTICE: Weights published in this catalog are for shipping purposes only. Actual weights may vary because some fittings are produced in multiple foundries. All fittings meet the AWWA standards to which they are designed.
For weights of specific fittings, please contact Tyler Union Waterworks Company.

*Not included in AWWA C110

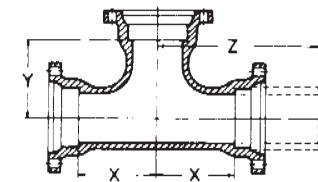
ANSI/AWWA C110/A21.10, ANSI/AWWA C111/A21.11

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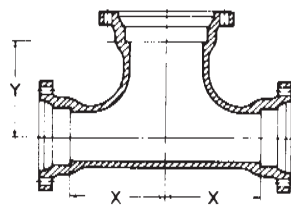


DUCTILE IRON C110 FULL BODY MECHANICAL JOINT FITTINGS

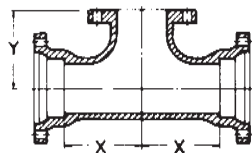
TEES (Con't)



**Straight Tees and
Reducing on Branch Tees**



Bullhead



MJxMJxFE

Run	Size Run	Branch	Dimensions			MJ	Weights	
			X	Y	Z		**MJxPExMJ	**MJxMJxFE
18	18	6	13.0	15.5	...	710	...	707
18	18	8	13.0	15.5	...	674	...	675
18	18	12	13.0	15.5	...	749	...	733
18	18	18	16.5	16.5	...	945	...	953
20	20	6	14.0	17.0	...	849	...	...
20	20	8	14.0	17.0	...	892	...	859
20	20	12	14.0	17.0	...	896	...	...
20	20	16	18.0	18.0	...	1095	...	...
20	20	20	18.0	18.0	...	1258	...	1168
24	24	6	15.0	19.0	...	1233	...	1228
24	24	8	15.0	19.0	...	1234	...	1242
24	24	12	15.0	19.0	...	1256	...	1165
24	24	14	15.0	19.0	...	1220	...	...
24	24	16	15.0	19.0	...	1245	...	...
24	24	18	22.0	22.0	...	1735	...	...
24	24	20	22.0	22.0	...	1720	...	...
24	24	24	22.0	22.0	...	1947	...	1795
30	30	6	18.0	23.0	...	2050	...	...
30	30	8	18.0	23.0	...	2060	...	...
30	30	10	18.0	23.0	...	2075	...	...
30	30	12	18.0	23.0	...	2090	...	...
30	30	16	18.0	23.0	...	2145	...	...
30	30	18	18.0	23.0	...	2170	...	...
30	30	20	18.0	23.0	...	2205	...	...
30	30	24	25.0	25.0	...	2880	...	...
30	30	30	25.0	25.0	...	2275	...	3080
36	36	6	20.0	26.0	...	2439	...	2430
36	36	8	20.0	26.0	...	2444	...	...
36	36	10	20.0	26.0	...	2535	...	...
36	36	12	20.0	26.0	...	2541	...	2550
36	36	14	20.0	26.0	...	2570	...	...
36	36	16	20.0	26.0	...	2585	...	2450
36	36	18	20.0	26.0	...	2610	...	...
36	36	20	20.0	26.0	...	2635	...	...
36	36	24	20.0	26.0	...	2792	...	2660
36	36	30	28.0	28.0	...	3545	...	...
36	36	36	28.0	28.0	...	3450	...	...
42	42	24	23.0	30.0	...	3690	...	...
42	42	30	31.0	31.0	...	4650	...	...
42	42	36	31.0	31.0	...	4880	...	...
42	42	42	31.0	31.0	...	6320	...	...
48	48	24	26.0	34.0	...	4995	...	...
48	48	30	26.0	34.0	...	5140	...	...
48	48	36	34.0	34.0	...	6280	...	...
48	48	42	34.0	34.0	...	8130	...	...
48	48	48	34.0	34.0	...	8420	...	...

* Not included in AWWA C110

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