



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

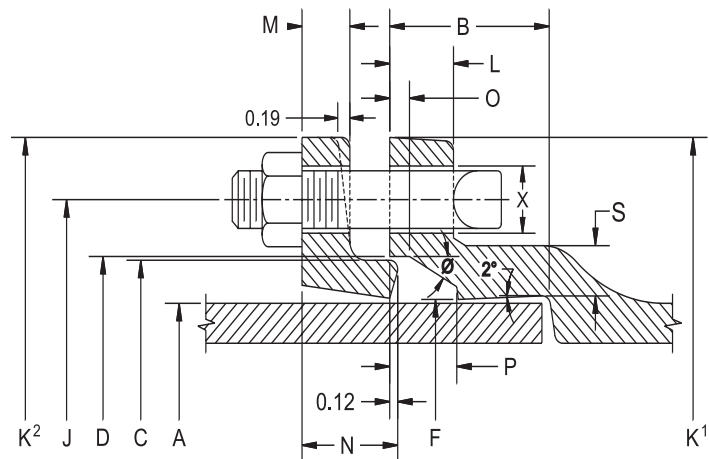
* Not included in AWWA C110.

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

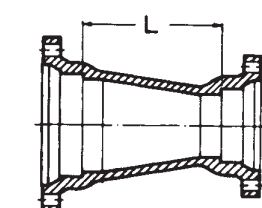
* Not included in AWWA C110.

14" THRU 48"
GLANDS MAY
BE TAPERED

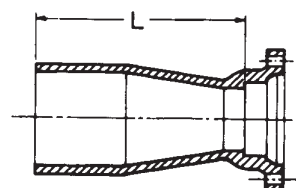


ANSI/AWWA C110/A21.10, ANSI/AWWA C111/A21.11

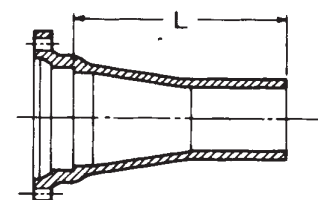
REDUCERS



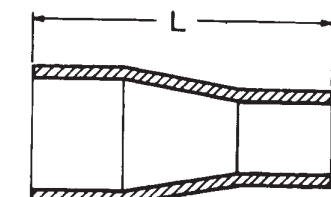
MJ Reducer



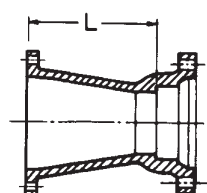
MJ Small End Bell Reducer



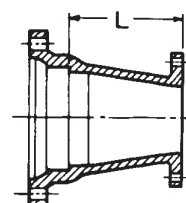
MJ Large End Bell Reducer



Plain End-Plain End Reducer



FExMJ Reducer



MJxFE Reducer

Size	Laying Lengths (L)						Weights					
	MJ	MJ-SEB	MJ-LEB	PExPE	FExMJ	MJxFE	MJ	MJ-SEB	MJ-LEB	PExPE	FExMJ	MJxFE
* 3x2	6	14	14	...	...	...	24	24	24	...	...	...
* 4x2	7	15	15	...	...	...	31	30	31	...	...	...
4x3	7	15	15	23	7	7	37	38	37	34	34	35
* 6x2	9	17	17	...	...	...	46	43	47	...	...	...
6x3	9	17	17	25	...	9	55	50	55	...	...	50
6x4	9	17	17	25	9	9	56	60	59	57	53	62
8x3	11	19	19	27	...	...	84	77	70	...	...	...
8x4	11	19	19	27	11	11	84	82	84	...	73	75
8x6	11	19	19	27	11	11	94	90	93	96	84	80
10x6	12	20	20	28	12	12	115	116	117	...	100	105
10x8	12	20	20	28	12	12	142	135	130	135	130	130
12x4	14	22	22	30	...	...	139	131	...	...	...	...
12x6	14	22	22	30	14	12	148	150	153	...	145	130
12x8	14	22	22	30	14	12	173	168	165	168	170	175
12x10	14	22	22	30	14	12	194	190	178	185	188	190
14x6	16	24	24	32	...	16	...	...	...	...	...	195
14x8	16	24	24	32	...	16	...	...	...	...	...	215
14x12	16	24	24	32	...	16	...	...	...	...	...	270
16x6	18	26	26	34	...	...	250	...	...	...	...	...
16x8	18	26	26	34	...	...	288	248	...	...	...	...
16x10	18	26	26	34	...	...	300	...	...	...	...	...
16x12	18	26	26	34	18	18	330	304	325	...	305	325
16x14	18	26	26	34	...	...	370	...	...	...	...	...
18x8	19	27	27	35	...	19	320	...	...	...	...	300
18x10	19	27	27	35	...	...	388	...	...	...	...	...
18x12	19	27	27	35	...	19	380	355	...	...	...	405
18x14	19	27	27	35	...	...	450	...	...	...	...	...
18x16	19	27	27	35	...	19	476	...	...	...	...	445
20x10	20	28	28	36	...	...	410	...	...	...	...	...
20x12	20	28	28	36	...	...	515	420	...	...	...	...
20x16	20	28	28	36	...	20	578	525	510	...	...	510
20x18	20	28	28	36	...	...	575	...	...	...	...	...
24x12	24	32	32	40	...	24	610	570	...	...	...	455
24x16	24	32	32	40	...	...	705	665	753	...	...	...
24x18	24	32	32	40	...	...	789	720	...	...	...	...
24x20	24	32	32	40	...	...	815	775	804	...	...	...
* 30x16	30	38	38	46	...	...	1150	1040	...	1015	...	...
30x18	30	38	38	46	...	...	1160	1050	...	1025	...	...
30x20	30	38	38	46	...	...	1225	1120	...	1090	...	...
30x24	30	38	38	46	...	...	1360	1255	1320	1215	...	...
36x20	36	44	44	52	...	...	1495	...	1466	...	...	...
36x24	36	44	44	52	...	...	1580	...	1535	1389	...	...
36x30	36	44	44	52	...	...	1919	1721	...	1585	...	...
42x24	42	50	50	58	...	...	2060	...	...	...	...	...
42x30	42	50	50	58	...	...	2370	...	...	...	...	...
42x36	42	50	50	58	...	...	2695	...	...	...	...	...
48x30	48	56	56	64	...	...	3005	...	...	...	...	...
48x36	48	56	56	64	...	...	3370	...	...	...	...	...
48x42	48	56	56	64	...	...	3750	...	...	...	...	...

* Not included in AWWA C110