



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

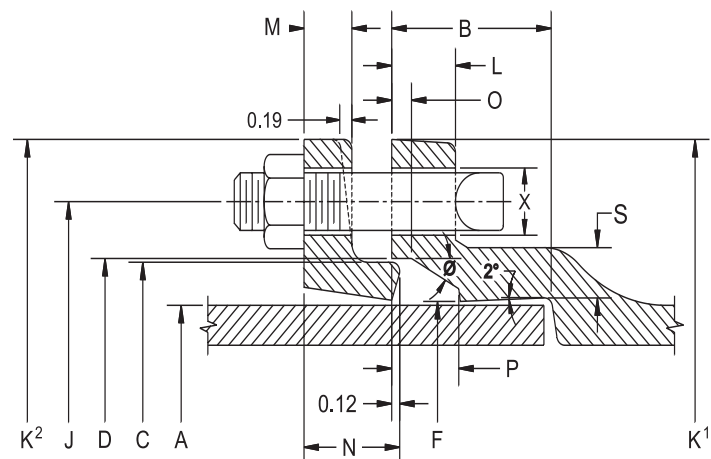
* Not included in AWWA C110.

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.

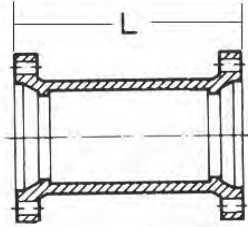
14" THRU 48"
GLANDS MAY
BE TAPERED



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



SOLID SLEEVES

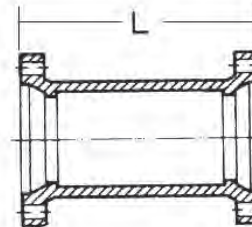


Standard

Size	Pipe O.D.	Short L	Short Weight	Long L	Long Weight
*2	2.50	8.0	13	12	18
3	3.96	7.5	25	12	36
4	4.80	7.5	35	12	47
6	6.90	7.5	45	12	65
8	9.05	7.5	65	12	90
10	11.10	7.5	85	12	115
12	13.20	7.5	120	12	136
16	17.40	9.5	206	15	281
18	19.50	9.5	246	15	362
20	21.60	9.5	275	15	404
24	25.80	9.5	360	15	540
30	32.00	15.0	745	24	1085
36	38.30	15.0	1047	24	1502
42	44.50	15.0	1312	24	1550
48	50.80	15.0	1585	24	1940

* Not included in AWWA C110

DUCTILE IRON C110 FULL BODY MECHANICAL JOINT FITTINGS



*** Dual Purpose †**

Size	Pipe O.D.	Short L	Short Weight	Long L	Long Weight
4	4.80/5.00	7.5	33	12	44
6	6.90/7.10	7.5	46	12	63
8	9.05/9.30	7.5	65	12	88
10	11.10/11.40	...	...	12	111
†12	13.20/13.50	...	...	12	221
†16	17.40/17.80	...	...	15	385

All Sizes Use MJ Dual Purpose Gland

* Not included in AWWA C110

† 12" & 16" are sold assembled

NOTE: Sizes 4-10" use standard MJ Gaskets;
12" and 16" require special duo gaskets.

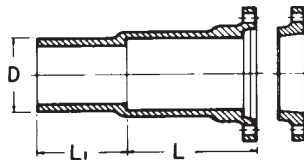
* MJ x PE DUAL-PURPOSE CUTTING-IN SLEEVE

With Dual-Purpose Accessories

(NOTES: Gland with cup-joint set screws available at extra cost when specified. NOT FOR RESTRAINT.)

Currently, Tyler and Union Dual Purpose Glands are NOT interchangeable.

Cutting-In Sleeve & Gland



Size	For Use On Pipe O.D.	L	L ¹	D	Weight Gland Only	Weight Gland & Sleeve
4	4.80 - 5.00	12	8	4.80	6.0	72
6	6.90 - 7.10	12	8	6.90	10.0	94
8	9.05 - 9.30	12	8	9.05	16.0	122
10	11.10 - 11.40	12	8	11.10	25.0	175
12	13.20 - 13.50	12	8	13.20	30.0	235

* Not included in AWWA C110.

ADAPTERS

Size	MJ x FE Dimensions	
	L	Weights
3	8	30
4	8	42
6	8	62
8	8	88
10	8	120
12	8	150
16	8	257
18	8	324
20	8	365
24	8	528
30	10	760
36	10	1070

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