



# Ductile Iron MJ Full Body Fittings

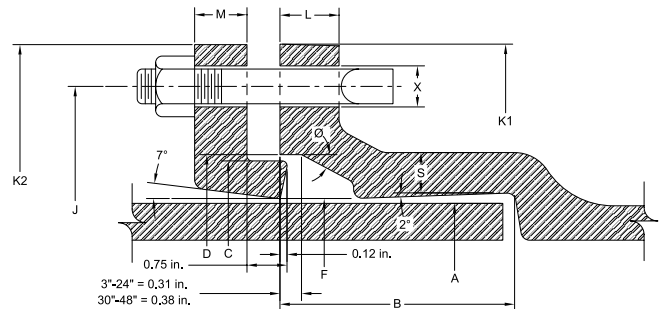
**ANSI/AWWA C110/A21.10**

**GENERAL SPECIFICATIONS**

- MATERIAL:** Ductile iron per ASTM A536
- PRESSURE:** 350 PSI rating for 2" - 24" sizes, 250 PSI rating for 30" - 48" and 150 PSI for 54"-64" or as noted
- TESTING:** In accordance with ANSI/AWWA C110/A21.10
- LAYING LENGTH:** In accordance with ANSI/AWWA C110/A21.10 (fittings not listed in ANSI/AWWA have dimensions per Star design as noted in the catalog)
- WEIGHTS:** Are in pounds, unless noted otherwise and do not include accessories, cement lining and coating
- FLANGES:** Flanged ends on fittings match ANSI/AWW C110/A21.10 and ANSI B16.1 class 125 flanges.
- CEMENT LINING:** In accordance with ANSI/AWWA C104/A21.4 -- sizes 2" - 3" single thickness and sizes 4" - 54" double thickness
- COATING:** Asphaltic seal coat inside and out in accordance with ANSI/AWWA C104/A21.4 and referenced in ANSI/AWWA C110/A21.10
- GASKETS:** SBR in accordance with ANSI/AWWA C111/A21.11
- T-BOLTS/NUTS:** Low alloy steel in accordance with ANSI/AWWA C11/A21.11
- APPROVALS:** Sizes 2" and greater are UL/ANSI/NSF Standards 61 and 372
- DIMENSIONS:** All dimensions are in inches unless noted otherwise.
- INSTALLATION:** Per ANSI/AWWA C600 and C111 using DIP conforming to C150/C151 and PVC pipe conforming to C900/C905



SUBMITTAL INFORMATION	
<b>PROJECT NAME:</b>	
<b>ENGINEER:</b>	
<b>CONTRACTOR:</b>	
<b>SPEC. SECTION:</b>	



MECHANICAL JOINT DIMENSIONS															
NOM. SIZE	A DIA.	B	C DIA.	D DIA.	F DIA.	J DIA.	K1 DIA.	K2 DIA.	L	M	S	Ø	X DIA.	BOLTS	
														SIZE	NO.
2	2.50	2.50	3.39	3.50	2.61	4.75	6.25	6.25	0.75	0.62	0.44	28°	3/4	5/8 x 3	2
3	3.96	2.50	4.84	4.94	4.06	6.19	7.69	7.69	0.94	0.62	0.52	28°	3/4	5/8 x 3	4
4	4.80	2.50	5.92	6.02	4.90	7.50	9.12	9.12	1.00	0.75	0.65	28°	7/8	3/4 x 3 1/2	4
6	6.90	2.50	8.02	8.12	7.00	9.50	11.12	11.12	1.06	0.88	0.70	28°	7/8	3/4 x 3 1/2	6
8	9.05	2.50	10.17	10.27	9.15	11.75	13.37	13.37	1.12	1.00	0.75	28°	7/8	3/4 x 4	6
10	11.10	2.50	12.22	12.34	11.20	14.00	15.69	15.62	1.19	1.00	0.80	28°	7/8	3/4 x 4	8
12	13.20	2.50	14.32	14.44	13.30	16.25	17.94	17.88	1.25	1.00	0.85	28°	7/8	3/4 x 4	8
14	15.30	3.50	16.40	16.54	15.44	18.75	20.31	20.25	1.31	1.25	0.89	28°	7/8	3/4 x 4 1/2	10
16	17.40	3.50	18.50	18.64	17.54	21.00	22.56	22.50	1.38	1.31	0.97	28°	7/8	3/4 x 4 1/2	12
18	19.50	3.50	20.60	20.74	19.64	23.25	24.83	24.75	1.44	1.38	1.05	28°	7/8	3/4 x 4 1/2	12
20	21.60	3.50	22.70	22.84	21.74	25.50	27.08	27.00	1.50	1.44	1.12	28°	7/8	3/4 x 4 1/2	14
24	25.80	3.50	26.90	27.04	25.94	30.00	31.58	31.50	1.62	1.56	1.22	28°	7/8	3/4 x 5	16
30	32.00	4.00	33.29	33.46	32.17	36.88	39.12	39.12	1.81	2.00	1.50	20°	1 1/8	1 x 6	20
36	38.30	4.00	39.59	39.76	38.47	43.75	46.00	46.00	2.00	2.00	1.80	20°	1 1/8	1 x 6	24
42	44.50	4.00	45.79	45.96	44.67	50.62	53.12	53.12	2.00	2.00	1.95	20°	1 3/8	1 1/4 x 6 1/2	28
48	50.80	4.00	52.09	52.26	50.97	57.50	60.00	60.00	2.00	2.00	2.20	20°	1 3/8	1 1/4 x 6 1/2	32
54 60 64	{ Fittings & Dimensions Available On Request }														

**SIZE RANGE (Please specify):** \_\_\_\_\_

Size Range \_\_\_\_\_

**LINING OPTIONS (Please check one):** \_\_\_\_\_

- Standard: Cement-lined and asphalt seal coat per ANSI/AWWA C104/A21.4 and UL/NSF-61
- Optional: FBE (Fusion Bonded Epoxy) per ANSI/AWWA C116/A21.15 and UL/NSF-61 - ID & OD Only
- Optional: P401 (Protecto 401) Ceramic Epoxy - sewer applications only. Not NSF-61
- Optional: Other (specify) \_\_\_\_\_

**COATING OPTIONS (Please check one):** \_\_\_\_\_

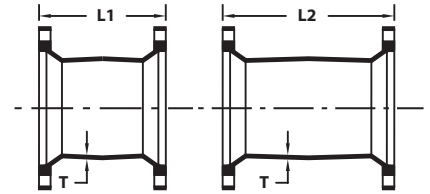
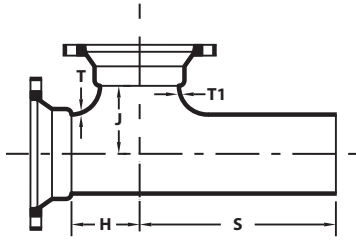
- Standard: Asphaltic seal coat per ANSI/AWWA C104/A21.4
- Optional: FBE (Fusion Bonded Epoxy) per ANSI/AWWA C116/A21.15 and UL/NSF-61 - ID & OD Only
- Optional: Other (specify) \_\_\_\_\_





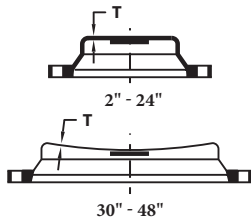
# Full Body MJ Fittings

ANSI/AWWA C110/A21.10

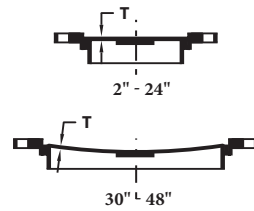


MJ x PE x MJ TEES						
NOM. SIZE	T	T1	H	J	S	WT (LBS.)
4 x 4	0.52	0.52	6.50	6.50	14.50	75
6 x 4	0.55	0.52	8.00	8.00	16.00	112
6 x 6	0.55	0.55	8.00	8.00	16.00	120
8 x 6	0.60	0.55	9.00	9.00	17.00	170
8 x 8	0.60	0.60	9.00	9.00	17.00	180
10 x 10	0.80	0.80	11.00	11.00	19.00	303
12 x 4	0.75	0.52	12.00	12.00	20.00	315
12 x 6	0.75	0.55	12.00	12.00	20.00	325
12 x 8	0.75	0.60	12.00	12.00	20.00	340
12 x 10	0.87	0.80	12.00	12.00	20.00	390
12 x 12	0.87	0.87	12.00	12.00	20.00	407

MJ SOLID SLEEVES					
NOM. SIZE	T	SHORT SLEEVES		LONG SLEEVES	
		L1	WT (LBS.)	L2	WT (LBS.)
2	0.39	7.50	12	12.00	18
3	0.48	7.50	25	12.00	30
4	0.52	7.50	35	12.00	45
6	0.55	7.50	45	12.00	65
8	0.60	7.50	65	12.00	85
10	0.68	7.50	85	12.00	115
12	0.75	7.50	110	12.00	145
14	0.66	9.50	150	15.00	195
16	0.70	9.50	180	15.00	235
18	0.75	9.50	215	15.00	285
20	0.80	9.50	240	15.00	325
24	0.89	9.50	320	15.00	425
30	1.03	15.00	635	24.00	885
36	1.15	15.00	855	24.00	1190
42	1.28	15.00	1115	24.00	1550
48	1.42	15.00	1385	24.00	1940



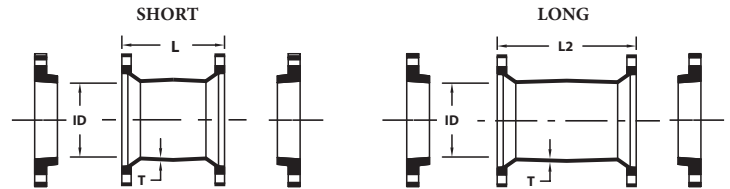
CAPS



PLUGS

MJ CAPS & PLUGS (SOLID OR TAPPED)				
NOM. SIZE	T	MAX. TAP	WT (LBS.)	
			CAPS	PLUGS
2	0.39	1 1/2	5	5
3	0.50	2	12	10
4	0.60	3	15	15
6	0.65	4	25	25
8	0.70	4	45	45
10	0.75	4	60	65
12	0.75	4	80	85
14	0.82	5	120	115
16	0.89	6	155	145
18	0.96	6	195	185
20	1.03	6	240	225
24	1.16	6	345	335
30	1.03	6	590	573
36	1.15	6	850	815
42	1.28	6	1180	1110
48	1.42	6	1595	1455

\*Threads in Accordance with ANSI/ASME B1.20.1



MJ DUAL PURPOSE SLEEVES W/ OVERSIZE GLANDS							
NOM. SIZE	PIPE SIZE	(I.D.)	T	SHORT		LONG	
				L1	WT (LBS.)	L2	WT (LBS.)
4	4.80 - 5.00	5.10	0.52	7.50	35	12.00	35
6	6.90 - 7.10	7.20	0.55	7.50	45	12.00	65
8	9.05 - 9.30	9.40	0.60	7.50	65	12.00	86
10	11.10 - 11.40	11.50	0.68	7.50	85	12.00	115
12	13.20 - 13.50	13.60	0.75	7.50	110	12.00	145
16	17.40 - 17.80	17.94	0.70	---	---	15.00	236

STAR<sup>®</sup> PIPE PRODUCTS