



Ductile Iron MJ Compact Fittings

ANSI/AWWA C153/A21.53

GENERAL SPECIFICATIONS

MATERIAL:	Ductile Iron per ASTM A536
PRESSURE:	350 PSI rating for 2" - 24" sizes, 250 PSI rating for 30" - 48" sizes and 150 PSI rating for 54" - 64" sizes
TESTING:	In accordance with ANSI/AWWA C153/A21.53, ANSI/AWWA C111/A21.11, UL and FM requirements
LAYING LENGTH:	In accordance with ANSI/AWWA C153/A21.53 (fittings not listed in ANSI/AWWA have dimensions per Star design as noted in the catalog)
DEFLECTION:	2"-4"=8° 6"=7° 8"-12"=5° 14"-16"=3 ½° 18"-24"=3° 30"-64"=2°
WEIGHTS:	Are in pounds, unless noted otherwise and do not include accessories, cement lining and coating
FLANGES:	Flanged ends on fittings match ANSI/AWWA C115/A21.15 and ANSI B16.1 class 125 flanges
CEMENT LINING:	In accordance with ANSI/AWWA C104/A21.4 -- size 2" - 3" single thickness and sizes 4" - 64" double thickness
COATING:	Asphaltic seal coat inside and out in accordance with ANSI/AWWA C104/A21.4 and referenced in ANSI/AWWA C153/A21.53
GASKETS:	SBR in accordance with ANSI/AWWA C111/A21.11
T-BOLTS/NUTS:	Low alloy steel in accordance with ANSI/AWWA C111/A21.11
APPROVALS:	3" - 12" UL/ULC Listed 2" and greater are UL/ANSI/NSF Standards 61 and 372 3" - 16" FM APPROVED. Please consult factory for detail listing and approvals.
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



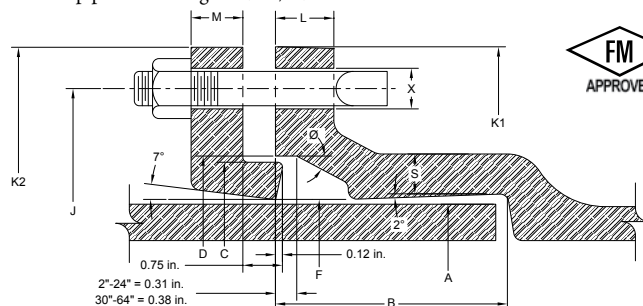
SUBMITTAL INFORMATION

PROJECT NAME:

ENGINEER:

CONTRACTOR:

SPEC. SECTION:



MECHANICALJOINT 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	6.19	6.25	0.58	0.62	0.36	28°	¾	⅝ x 3	2
3	3.96	2.50	4.84	4.94	4.06	6.19	7.62	7.69	0.58	0.62	0.39	28°	¾	⅝ x 3	4
4	4.80	2.50	5.92	6.02	4.90	7.50	9.06	9.12	0.60	0.75	0.39	28°	7/8	¾ x 3 ½	4
6	6.90	2.50	8.02	8.12	7.00	9.50	11.06	11.12	0.63	0.88	0.43	28°	7/8	¾ x 3 ½	6
8	9.05	2.50	10.17	10.27	9.15	11.75	13.31	13.37	0.66	1.00	0.45	28°	7/8	¾ x 3 ½	6
10	11.10	2.50	12.22	12.34	11.20	14.00	15.62	15.62	0.70	1.00	0.47	28°	7/8	¾ x 3 ½	8
12	13.20	2.50	14.32	14.44	13.30	16.25	17.88	17.88	0.73	1.00	0.49	28°	7/8	¾ x 3 ½	8
14	15.30	3.50	16.40	16.54	15.44	18.75	20.25	20.25	0.79	1.25	0.55	28°	7/8	¾ x 4	10
16	17.40	3.50	18.50	18.64	17.54	21.00	22.50	22.50	0.85	1.31	0.58	28°	7/8	¾ x 4	12
18	19.50	3.50	20.60	20.74	19.64	23.25	24.83	24.75	1.00	1.38	0.68	28°	7/8	¾ x 4	12
20	21.60	3.50	22.70	22.84	21.74	25.50	27.08	27.00	1.02	1.44	0.69	28°	7/8	¾ x 4	14
24	25.80	3.50	26.90	27.04	25.94	30.00	31.58	31.50	1.02	1.56	0.75	28°	7/8	¾ x 4 ½	16
30	32.00	4.00	33.29	33.46	32.17	36.88	39.12	39.12	1.31	2.00	0.82	20°	1 ½	1 x 5 ½	20
36	38.30	4.00	39.59	39.76	38.47	43.75	46.00	46.00	1.45	2.00	1.00	20°	1 ½	1 x 5 ½	24
42	44.50	4.00	45.79	45.96	44.67	50.62	53.12	53.12	1.45	2.00	1.25	20°	1 ¾	1 ¼ x 6	28
48	50.80	4.00	52.09	52.26	50.97	57.50	60.00	60.00	1.45	2.00	1.35	20°	1 ¾	1 ¼ x 6	32
54	57.56	4.00	58.82	59.02	57.73	63.20	65.70	65.70	1.88	2.00	1.50	20°	1 ¾	1 ¼ x 6 ½	36
60	61.61	4.00	62.87	63.07	61.78	67.72	70.22	70.22	1.88	2.00	1.55	20°	1 ¾	1 ¼ x 6 ½	36
64	65.67	4.00	66.96	67.13	65.84	71.86	74.36	74.36	1.88	2.00	1.62	20°	1 ¾	1 ¼ x 6 ½	38

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/A21.16 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

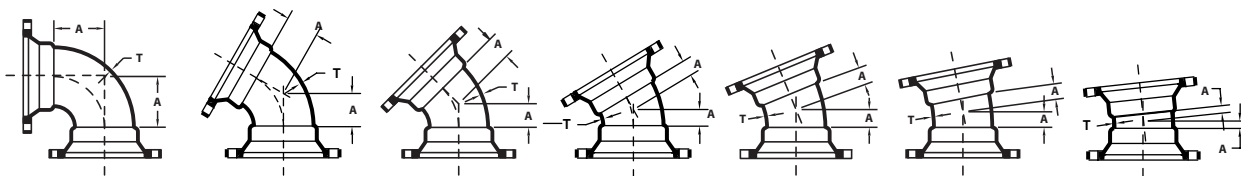
Optional: FBE (Fusion Bonded Epoxy) per ANSI/AWWA C116/A21.16 and UL/NSF-61 - ID & OD Only

Optional: Other (specify) _____

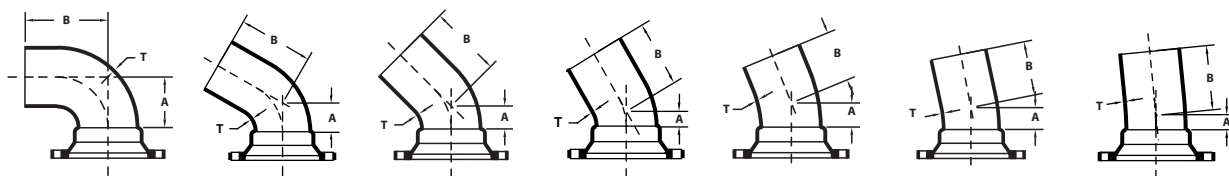


Compact MJ Fittings

ANSI/AWWA C153/A21.53



MJ x MJ BENDS		90° MJ x MJ BENDS (1/4)		60° MJ x MJ BENDS (1/6)		45° MJ x MJ BENDS (1/8)		30° MJ x MJ BENDS (1/12)		22 1/2° MJ x MJ BENDS (1/16)		11 1/4° MJ x MJ BENDS (1/32)		5 5/8° MJ x MJ BENDS (1/64)	
NOM. SIZE	T	A	WT (LBS.)	A	WT (LBS.)	A	WT (LBS.)	A	WT (LBS.)	A	WT (LBS.)	A	WT (LBS.)	A	WT (LBS.)
2	0.30	3.25	14	-	-	1.80	13	-	-	1.00	9	1.00	8	-	-
3	0.33	3.50	23	-	-	1.50	21	-	-	1.00	16	1.00	14	1.00	13
4	0.34	4.00	27	3.00	21	2.00	23	-	-	1.50	18	1.25	16	1.25	16
6	0.36	5.00	39	4.00	35	3.00	32	-	-	2.00	32	1.50	30	1.50	27
8	0.38	6.50	57	4.50	50	3.50	46	3.00	44	2.50	46	1.75	42	1.75	38
10	0.40	7.50	89	-	-	4.50	70	-	-	3.00	64	2.00	58	2.00	56
12	0.42	9.00	108	6.50	104	5.50	98	4.00	87	3.50	84	2.25	74	2.25	73
14	0.47	11.50	180	-	-	5.00	145	-	-	3.75	140	2.50	128	2.50	121
16	0.50	12.50	264	7.50	210	5.50	202	4.50	177	3.75	178	2.50	148	2.50	150
18	0.54	14.00	335	-	-	6.00	250	-	-	4.50	255	3.00	205	3.00	204
20	0.57	15.00	400	10.50	365	7.00	305	-	-	4.50	262	3.00	245	3.00	239
24	0.61	17.00	565	10.50	479	7.50	405	6.00	385	4.50	412	3.00	315	3.00	317
30	0.66	21.50	1005	13.50	843	11.50	798	9.75	692	6.75	665	4.75	568	4.75	568
36	0.74	24.50	1562	17.00	1350	11.50	1164	11.00	1080	7.75	960	5.00	840	5.00	825
42	0.82	29.25	2506	19.00	2150	14.00	1792	12.00	1465	9.00	1350	6.00	1319	6.00	1125
48	0.90	33.25	3045	21.00	2650	15.00	2390	13.25	2075	10.00	1886	6.50	1700	6.50	1600
54	1.05	37.00	4023	-	-	20.25	3062	-	-	10.25	2198	5.00	1711	-	-
60	1.10	39.50	4714	24.00	3673	21.25	3487	19.00	3307	10.75	2434	7.00	2033	-	-
64	1.16	42.00	5508	-	-	22.25	4000	18.50	3620	11.00	2727	7.00	2245	7.00	2247



MJ x PE BENDS		90° MJ x PE BENDS (¼)			60° MJ x PE BENDS (⅙)			45° MJ x PE BENDS (⅛)			30° MJ x PE BENDS (¹⁄₁₂)			22 ½° MJ x PE BENDS (¹⁄₁₆)			11 ¼° MJ x PE BENDS (¹⁄₃₂)			5 5⁄8° MJ x PE BENDS (¹⁄₆₄)		
NOM. SIZE	T	A	B	WT (LBS.)	A	B	WT (LBS.)	A	B	WT (LBS.)	A	B	WT (LBS.)	A	B	WT (LBS.)	A	B	WT (LBS.)	A	B	WT (LBS.)
3	0.33	3.50	8.50	16	-	-	-	1.50	7.00	13	-	-	-	1.00	6.50	12	1.00	6.50	12	-	-	-
4	0.34	4.00	9.50	22	-	-	-	2.00	7.50	19	-	-	-	1.50	7.00	18	1.25	6.25	17	-	-	-
6	0.36	5.00	12.00	40	-	-	-	3.00	8.50	31	-	-	-	2.00	7.50	29	1.50	7.00	27	-	-	-
8	0.38	6.50	12.50	61	-	-	-	3.50	9.00	46	-	-	-	2.50	8.00	43	1.75	7.25	39	-	-	-
10	0.40	7.50	13.00	83	-	-	-	4.50	10.00	68	-	-	-	3.00	8.50	61	2.00	7.50	52	-	-	-
12	0.42	9.00	14.50	114	-	-	-	5.50	11.00	95	-	-	-	3.50	9.00	81	2.25	7.75	70	-	-	-
14	0.47	11.50	19.50	197	-	-	-	5.00	13.00	148	-	-	-	3.75	11.25	133	2.50	10.50	122	-	-	-
16	0.50	12.50	20.50	248	-	-	-	5.50	13.50	184	-	-	-	3.75	11.75	166	2.50	10.50	148	-	-	-
18	0.54	14.00	21.00	325	-	-	-	6.00	13.00	235	-	-	-	6.00	13.00	235	6.00	13.00	235	-	-	-
20	0.57	15.00	22.50	390	-	-	-	7.00	14.00	300	-	-	-	7.00	14.00	300	7.00	14.00	300	-	-	-
24	0.61	17.00	25.00	575	-	-	-	7.50	14.50	390	-	-	-	7.50	14.50	395	7.50	14.50	400	-	-	-
30	0.66	22.75	31.75	865	13.50	22.50	846	10.50	19.50	715	9.75	18.75	762	6.75	15.75	600	4.75	13.75	535	4.75	13.75	505
36	0.74	24.50	33.50	1355	-	-	-	12.00	21.00	1040	-	-	-	7.75	16.75	865	5.00	14.00	725	-	-	-
42	0.82	29.25	38.25	2055	-	-	-	14.00	23.00	1460	-	-	-	9.00	18.00	1200	6.00	15.00	1030	-	-	-
48	0.90	33.25	42.25	2805	-	-	-	15.00	24.00	1905	-	-	-	10.00	19.00	1575	6.50	15.50	1290	-	-	-