



Domestic Ductile Iron MJ Compact Fittings

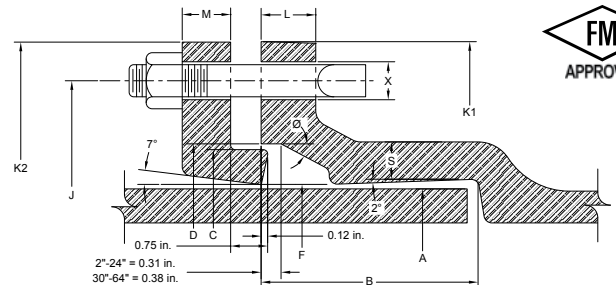
ANSI/AWWA C153/A21.53

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 1/2° 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:	Asphalitic 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 pipe conforming to C150/C151 and PVC pipe conforming to C900/C905



SUBMITTAL INFORMATION

PROJECT NAME: ENGINEER: CONTRACTOR: SPEC. SECTION: 

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	6.19	6.25	0.58	0.62	0.36	28°	3/4	5/8 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°	3/4	5/8 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	3/4 x 3 1/2	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	3/4 x 3 1/2	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	3/4 x 3 1/2	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	3/4 x 3 1/2	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	3/4 x 3 1/2	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	3/4 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	3/4 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	3/4 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	3/4 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	3/4 x 4 1/2	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 1/8	1 x 5 1/2	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 1/8	1 x 5 1/2	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 3/8	1 1/4 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 3/8	1 1/4 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 3/8	1 1/4 x 6 1/2	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 3/8	1 1/4 x 6 1/2	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 3/8	1 1/4 x 6 1/2	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/A21.15 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: Asphalitic 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)

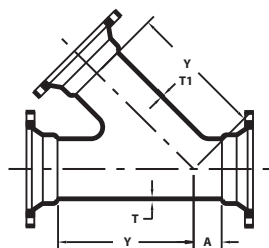
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* REGISTERED TRADEMARK OF STAR PIPE PRODUCTS



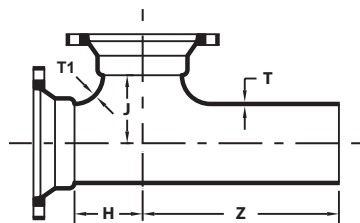
Compact MJ Fittings

ANSI/AWWA C153/A21.53



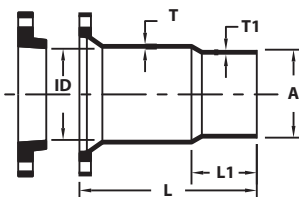
45° MJ LATERALS

NOM. SIZE	T	T1	A	Y	WT (LBS.)
3 x 3	0.33	0.33	2.50	8.50	36
4 x 3	0.34	0.33	2.50	8.50	40
4 x 4	0.34	0.34	2.50	8.50	41
6 x 4	0.36	0.34	1.50	11.00	53
6 x 6	0.36	0.36	3.00	12.50	85
8 x 3	0.38	0.33	0.50	13.00	74
8 x 4	0.38	0.34	0.50	13.00	77
8 x 6	0.38	0.36	2.00	14.50	90
8 x 8	0.38	0.38	3.50	16.00	102
10 x 4	0.40	0.34	0.00	15.00	150
10 x 6	0.40	0.36	1.00	16.00	158
10 x 8	0.40	0.38	2.50	17.00	172
10 x 10	0.40	0.40	3.50	19.00	210
12 x 4	0.42	0.34	0.00	16.50	150
12 x 6	0.42	0.36	1.50	18.50	186
12 x 8	0.42	0.38	1.50	18.50	188
12 x 10	0.42	0.40	3.00	20.00	250
12 x 12	0.42	0.42	4.50	22.50	272
14 x 6	0.47	0.36	0.00	19.50	245
14 x 8	0.47	0.38	1.50	21.00	279
14 x 10	0.47	0.40	3.00	22.50	316
14 x 14	0.47	0.47	6.00	25.00	474
16 x 4	0.50	0.34	0.00	21.00	272
16 x 6	0.50	0.36	0.00	21.00	300
16 x 8	0.50	0.38	0.50	22.50	349
16 x 10	0.50	0.40	2.00	24.00	370
16 x 12	0.50	0.42	3.50	25.00	453
16 x 14	0.50	0.47	5.00	26.50	500
16 x 16	0.50	0.50	6.50	28.00	575



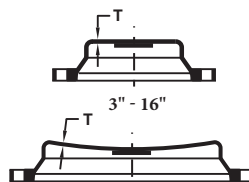
MJ x PE x MJ TEES

NOM. SIZE	T	T1	H	J	Z	WT (LBS.)
6 x 4	0.36	0.34	4.00	5.00	12.00	49
6 x 6	0.36	0.36	5.00	5.00	12.00	57
8 x 6	0.38	0.36	5.50	6.50	11.50	74
8 x 8	0.38	0.38	6.50	6.50	15.00	91
10 x 10	0.40	0.40	7.50	7.50	13.00	115
12 x 12	0.42	0.42	8.75	8.75	14.50	155
16 x 16	0.50	0.50	11.50	11.50	20.63	337

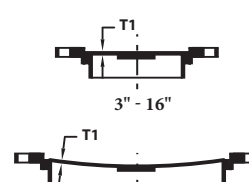


MJ x PE CUTTING IN SLEEVE W/ OVER SIZE GLAND

NOM. SIZE	ID	T	T1	A	L	L1	WT (LBS.)
4	5.10	0.36	0.34	4.80	20.00	9.00	50
6	7.20	0.38	0.36	6.90	20.00	9.00	62
8	9.40	0.40	0.38	9.05	20.00	9.00	70
10	11.50	0.42	0.40	11.10	20.00	9.00	105
12	13.60	0.47	0.42	13.20	20.00	9.00	128
16	17.94	0.54	0.50	17.40	20.00	9.00	275



CAP



PLUG

MJ CAPS & PLUGS (SOLID OR TAPPED)

NOM. SIZE	T	T1	MAX. TAP	WT (LBS.)	
				PLUGS	CAPS
3	0.46	0.50	2	9	8
4	0.34	0.40	2	13	9
6	0.42	0.42	2	20	15
8	0.44	0.44	2	30	23
10	0.46	0.46	2	39	33
12	0.48	0.48	2	52	44
14	0.55	0.55	2 ½	93	64
16	0.56	0.56	2 ½	116	79
18	0.54	0.54	2 ½	135	121
20	0.57	0.57	2 ½	161	140
24	0.61	0.65	3	239	199
30	0.70	0.66	4	387	361
36	1.03	1.00	4	689	635
42	1.13	1.13	4	965	896
48	1.43	1.25	4	1291	1329
54	2.16	2.19	6	2050	2167
60	2.25	2.38	6	2446	2571
64	2.38	2.56	6	2850	3018

Threads in Accordance with ANSI/ASME B1.20.1