



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:	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 pipe conforming to C150/C151 and PVC pipe conforming to C900/C905



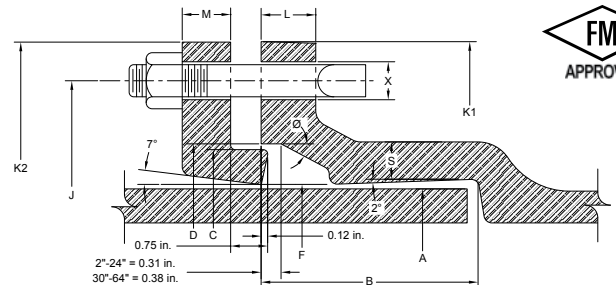
SUBMITTAL INFORMATION

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: 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) _____

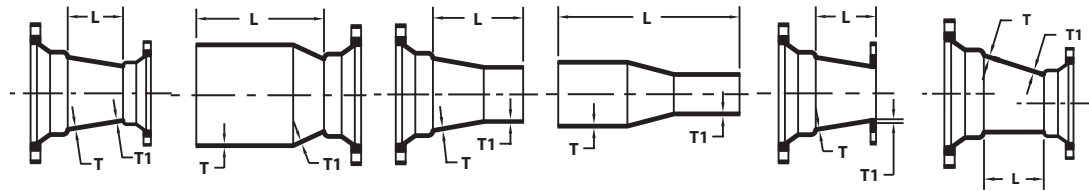
REV1701

* REGISTERED TRADEMARK OF STAR PIPE PRODUCTS



Compact MJ Fittings

ANSI/AWWA C153/A21.53



REDUCERS			MJ x MJ		SEB		LEB		PE x PE		MJ x FE		ECCENTRIC	
NOM. SIZE	T	T1	L	WT (LBS.)	L	WT (LBS.)	L	WT (LBS.)	L	WT (LBS.)	L	WT (LBS.)	L	WT (LBS.)
4 x 3	0.34	0.33	3.00	16	8.50	17	8.50	16	14.00	14	5.00	19	3.00	15
6 x 2	0.36	0.30	---	---	---	---	---	---	---	---	7.00	23	---	---
6 x 3	0.36	0.33	5.00	22	10.62	24	10.50	19	16.00	19	6.00	25	---	---
6 x 4	0.36	0.34	4.00	24	9.50	23	9.50	23	15.00	22	5.00	30	4.00	24
8 x 4	0.38	0.34	5.00	32	10.50	30	10.50	34	16.00	30	7.00	38	5.00	31
8 x 6	0.38	0.36	4.00	36	9.50	35	9.50	32	15.00	33	6.00	41	---	---
10 x 4	0.40	0.34	7.00	46	12.50	44	12.50	43	---	---	---	---	---	---
10 x 6	0.40	0.36	5.00	47	10.50	46	10.50	46	16.00	46	7.00	54	5.00	46
10 x 8	0.40	0.38	4.00	50	9.50	49	9.50	50	15.00	47	6.00	62	4.00	48
12 x 4	0.42	0.34	9.00	58	14.50	60	14.50	57	20.00	58	11.00	66	---	---
12 x 6	0.42	0.36	7.00	60	12.50	53	12.50	57	18.00	57	9.00	69	7.00	60
12 x 8	0.42	0.38	5.00	60	10.50	61	10.50	59	16.00	54	7.00	82	5.00	59
12 x 10	0.42	0.40	4.00	64	9.50	53	9.50	58	15.00	54	7.00	85	4.00	61
14 x 6	0.47	0.36	9.00	110	16.90	100	14.50	105	---	---	---	---	---	---
14 x 8	0.47	0.38	7.00	122	14.90	99	12.40	98	20.30	91	---	---	---	---
14 x 10	0.47	0.40	5.00	120	12.90	96	10.40	92	18.30	88	8.00	112	---	---
14 x 12	0.47	0.42	4.00	132	11.90	90	9.40	92	17.30	89	---	---	4.00	94
16 x 6	0.50	0.36	11.00	120	21.00	125	16.50	144	24.30	93	13.00	128	---	---
16 x 8	0.50	0.38	9.00	118	18.00	124	14.50	136	22.30	119	11.00	133	9.00	119
16 x 10	0.50	0.40	7.00	118	15.00	124	12.50	125	20.50	119	9.00	136	9.00	129
16 x 12	0.50	0.42	5.00	115	12.90	122	10.50	116	18.30	99	7.00	145	5.00	115
16 x 14	0.50	0.47	4.00	131	12.00	133	12.00	135	19.70	129	---	---	---	---
18 x 8	0.54	0.38	13.00	201	20.00	170	19.50	195	---	---	16.00	190	13.00	165
18 x 10	0.54	0.40	10.00	196	18.00	165	17.40	185	25.50	160	12.00	179	---	---
18 x 12	0.54	0.42	7.00	180	15.50	150	14.00	150	19.50	150	12.00	198	---	---
18 x 14	0.54	0.47	6.00	200	15.00	175	15.00	200	---	---	---	---	6.00	168
18 x 16	0.54	0.50	5.00	196	12.50	170	12.50	192	---	---	---	---	5.00	174
20 x 6	0.57	0.36	---	---	24.00	182	---	---	---	---	18.00	203	---	---
20 x 8	0.57	0.38	16.00	227	24.00	191	---	---	---	---	---	---	---	---
20 x 10	0.57	0.40	16.00	220	22.12	200	19.00	210	---	---	---	---	---	---
20 x 12	0.57	0.42	12.00	227	17.50	170	16.00	205	21.50	164	14.00	234	8.00	183
20 x 14	0.57	0.47	10.00	200	18.00	190	17.90	205	---	---	---	---	---	---
20 x 16	0.57	0.50	7.00	231	13.50	185	13.50	200	---	---	9.00	237	8.00	217
20 x 18	0.57	0.54	4.00	225	12.00	200	12.00	215	---	---	---	---	8.00	235
24 x 6	0.61	0.36	22.00	279	---	---	---	---	---	---	22.00	284	---	---
24 x 8	0.61	0.38	20.00	263	---	---	---	---	22.50	201	---	---	20.00	287
24 x 10	0.61	0.40	18.00	286	21.50	235	---	---	---	---	20.00	306	18.00	287
24 x 12	0.61	0.42	16.00	263	21.50	275	21.00	290	22.50	213	18.00	318	16.00	285
24 x 14	0.61	0.47	14.00	310	22.00	310	21.90	315	25.00	238	16.00	323	14.00	298
24 x 16	0.61	0.50	13.00	279	21.00	285	17.50	285	23.10	323	---	---	12.00	299
24 x 18	0.61	0.54	10.00	284	18.00	300	18.00	310	21.00	228	---	---	---	---
24 x 20	0.61	0.57	7.00	328	15.00	276	13.50	275	24.00	271	---	---	7.00	370
30 x 12	0.66	0.42	30.00	530	---	---	39.00	565	---	---	---	---	---	---
30 x 14	0.66	0.47	30.00	585	---	---	39.00	598	---	---	---	---	30.00	583
30 x 16	0.66	0.50	30.00	633	39.00	565	39.00	623	48.00	690	---	---	30.00	613
30 x 18	0.66	0.54	28.00	658	37.00	654	37.00	635	---	---	---	---	28.00	800
30 x 20	0.66	0.57	24.00	628	33.00	590	33.00	603	---	---	---	---	24.00	630
30 x 24	0.66	0.61	10.00	478	24.50	536	24.50	526	---	---	---	---	10.00	570
36 x 4	0.74	0.34	36.00	712	---	---	---	---	---	---	---	---	---	---

(Cont'd)➡

UCAT:19.01

* REGISTERED TRADEMARK OF STAR PIPE PRODUCTS