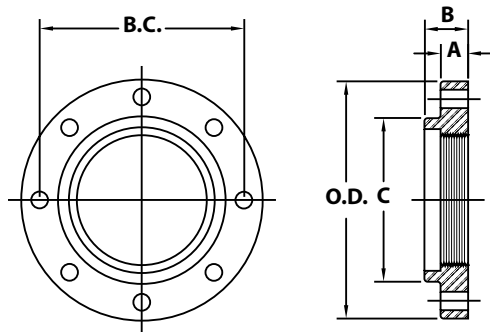


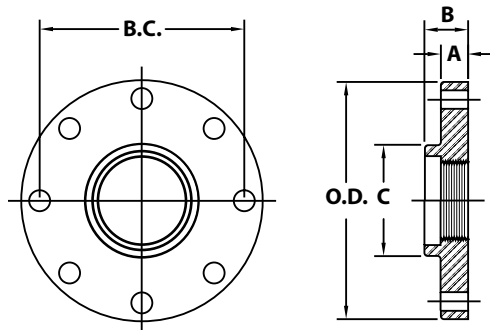


Flanges

ANSI/AWWA C110/A21.10



HI HUB THREADED 125 LB. FLANGES FOR DUCTILE PIPE (DUCTILE IRON)											
NOM. SIZE	OD PIPE	FLANGE THK. A	FLANGE THK. B	THREAD LENGTH	OD FLANGE O.D.	HUB DIA. C	BOLT CIRCLE B.C.	BOLT HOLE DIA.	BOLT DIA. & LENGTH	NO. OF BOLT HOLES	WT (LBS.)
2	2.50	0.62	1.25	1.00	6.00	3.06	4.75	3/4	5/8 x 2 1/4	4	4
3	3.96	0.75	1.69	1.25	7.50	4.45	6.00	3/4	5/8 x 2 1/2	4	7
4	4.80	0.94	1.81	1.37	9.00	5.32	7.50	3/4	5/8 x 3	8	12
6	6.90	1.00	2.00	1.53	11.00	7.56	9.50	7/8	3/4 x 3 1/2	8	17
8	9.05	1.12	2.25	1.75	13.50	9.69	11.75	7/8	3/4 x 3 1/2	8	26
10	11.10	1.19	2.44	1.88	16.00	12.00	14.25	1	7/8 x 4	12	37
12	13.20	1.25	2.56	2.12	19.00	14.06	17.00	1	7/8 x 4	12	55
14	15.30	1.38	2.62	2.12	21.00	16.25	18.75	1 1/8	1 x 4 1/2	12	70
16	17.40	1.44	2.75	2.12	23.50	18.44	21.25	1 1/8	1 x 4 1/2	16	80
18	19.50	1.56	3.00	2.25	25.00	20.53	22.75	1 1/4	1 1/8 x 5	16	85
20	21.60	1.69	3.25	2.44	27.50	22.63	25.00	1 1/4	1 1/8 x 5	20	106
24	25.80	1.88	3.50	2.75	32.00	26.82	29.50	1 3/8	1 1/4 x 5 1/2	20	147
30	32.00	2.12	3.75	3.37	38.75	32.75	36.00	1 3/8	1 1/4 x 6 1/2	28	224
36	38.30	2.38	5.00	4.00	46.00	39.12	42.75	1 5/8	1 1/2 x 7	32	337
42	44.50	2.62	5.12	4.50	53.00	46.00	49.50	1 5/8	1 1/2 x 7 1/2	36	495
48	50.80	2.75	5.50	5.12	59.50	52.25	56.00	1 5/8	1 1/2 x 8	44	622
54	57.56	3.00	6.45	4.75	66.25	58.75	62.75	2	1 3/4 x 8 1/2	44	711
60	61.61	3.12	6.75	5.00	73.00	63.00	69.25	2	1 3/4 x 9	52	1038
64	65.67	3.38	7.06	5.25	80.00	67.18	76.00	2	1 3/4 x 9	52	1510



REDUCING 125 LB. FLANGES FOR DUCTILE PIPE (DUCTILE IRON)											
NOM. SIZE	OD PIPE	FLANGE THK. A	FLANGE THK. B	THREAD LENGTH	OD FLANGE O.D.	HUB DIA. C	BOLT CIRCLE B.C.	BOLT HOLE DIA.	BOLT DIA. & LENGTH	NO. OF BOLT HOLES	WT (LBS.)
4 x 3	3.96	0.94	1.37	0.94	9.00	4.45	7.50	3/4	5/8 x 3	8	16
6 x 4	4.80	1.00	1.56	1.00	11.00	5.32	9.50	7/8	3/4 x 3 1/2	8	25
8 x 4	4.80	1.12	1.75	1.00	13.50	5.32	11.75	7/8	3/4 x 3 1/2	8	40
8 x 6	6.90	1.12	1.75	1.16	13.50	7.56	11.75	7/8	3/4 x 3 1/2	8	35
10 x 8	9.05	1.19	2.00	1.38	16.00	9.69	14.25	1	7/8 x 4	12	50
12 x 8	9.05	1.25	2.19	1.38	19.00	9.69	17.00	1	7/8 x 4	12	85
12 x 10	11.10	1.25	2.19	1.38	19.00	12.00	17.00	1	7/8 x 4	12	65

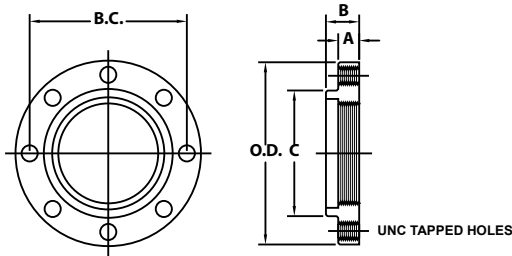
STAR[®] PIPE PRODUCTS



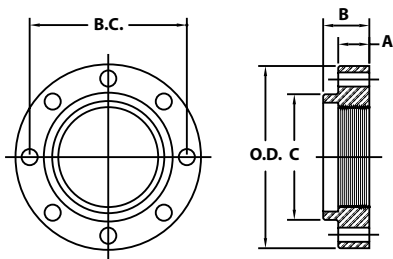


Flanges

ANSI/AWWA C110/A21.10



THREADED 125 LB. FLANGES FOR STUDS FOR DUCTILE PIPE (DUCTILE IRON)										
NOM. SIZE	OD PIPE	FLANGE THK. A	FLANGE THK. B	THREAD LENGTH	OD FLANGE O.D.	HUB DIA. C	BOLT CIRCLE B.C.	BOLT HOLE THREADS (UNC-2A)	NO. OF BOLT HOLES	WT (LBS.)
2	2.50	0.62	1.25	1.00	6.00	3.06	4.75	5/8 - 11	4	4
3	3.96	0.75	1.69	1.25	7.50	4.45	6.00	5/8 - 11	4	7
4	4.80	0.94	1.81	1.37	9.00	5.32	7.50	5/8 - 11	8	12
6	6.90	1.00	2.00	1.53	11.00	7.56	9.50	3/4 - 10	8	17
8	9.05	1.12	2.25	1.75	13.50	9.69	11.75	3/4 - 10	8	26
10	11.10	1.19	2.44	1.88	16.00	12.00	14.25	7/8 - 9	12	37
12	13.20	1.25	2.56	2.12	19.00	14.06	17.00	7/8 - 9	12	55
14	15.30	1.38	2.62	2.12	21.00	16.25	18.75	1 - 8	12	70
16	17.40	1.44	2.75	2.12	23.50	18.44	21.25	1 - 8	16	80
18	19.50	1.56	3.00	2.25	25.00	20.53	22.75	1 1/8 - 7	16	85
20	21.60	1.69	3.25	2.44	27.50	22.63	25.00	1 1/8 - 7	20	106
24	25.80	1.88	3.50	2.75	32.00	26.82	29.50	1 1/4 - 7	20	147
30	32.00	2.12	3.75	3.37	38.75	32.75	36.00	1 1/4 - 7	28	224
36	38.30	2.38	5.00	4.00	46.00	39.12	42.75	1 1/2 - 6	32	337
42	44.50	2.62	5.12	4.50	53.00	46.00	49.50	1 1/2 - 6	36	495
48	50.80	2.75	5.50	5.12	59.50	52.25	56.00	1 1/2 - 6	44	622
54	57.56	3.00	6.45	4.75	66.25	58.75	62.75	1 3/4 - 5	44	711
60	61.61	3.12	6.75	5.00	73.00	63.00	69.25	1 3/4 - 5	52	1038
64	65.67	3.38	7.06	5.25	80.00	67.18	76.00	1 3/4 - 5	52	1510



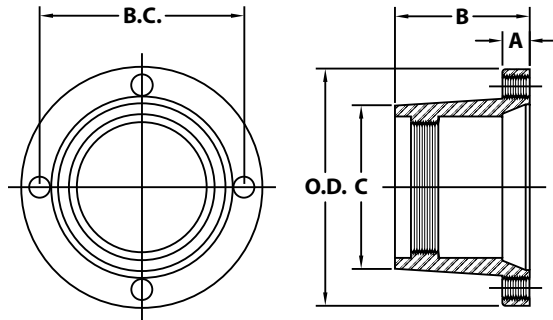
THREADED 250 LB. FLANGES FOR DUCTILE PIPE (DUCTILE IRON)											
NOM. SIZE	OD PIPE	FLANGE THK. A	FLANGE THK. B	THREAD LENGTH	OD FLANGE O.D.	HUB DIA. C	BOLT CIRCLE B.C.	BOLT HOLE DIA.	BOLT DIA. & LENGTH	NO. OF BOLT HOLES	WT (LBS.)
3	3.96	1.12	1.56	1.19	8.25	4.62	6.62	7/8	3/4 x 3 1/2	8	10
4	4.80	1.25	1.75	1.31	10.00	5.75	7.88	7/8	3/4 x 4	8	19
6	6.90	1.44	1.94	1.56	12.50	8.12	10.62	7/8	3/4 x 4	12	31
8	9.05	1.62	2.19	1.75	15.00	10.25	13.00	1	7/8 x 4 1/2	12	47
10	11.10	1.88	2.38	1.94	17.50	12.62	15.25	1 1/8	1 x 5 1/2	16	70
12	13.20	2.00	2.56	2.19	20.50	14.75	17.75	1 1/4	1 1/8 x 5 1/2	16	114
14	15.30	2.12	2.69	2.25	23.00	16.25	20.25	1 1/4	1 1/8 x 6	20	122
16	17.40	2.25	2.88	2.50	25.50	18.38	22.50	1 3/8	1 1/4 x 6 1/2	20	159
18	19.50	2.38	3.00	2.56	28.00	20.53	24.75	1 3/8	1 1/4 x 6 1/2	24	205
20	21.60	2.50	3.31	2.87	30.50	22.63	27.00	1 3/8	1 1/4 x 7	24	220
24	25.80	2.75	3.75	3.25	36.00	26.82	32.00	1 3/8	1 1/2 x 7 1/2	24	342
30	32.00	3.00	4.75	4.33	43.00	35.00	39.25	2	1 3/4 x 8 1/2	28	502
36	38.30	3.38	5.37	4.63	50.00	41.25	46.00	2 1/4	2 x 9 1/2	32	690

STAR[®] PIPE PRODUCTS

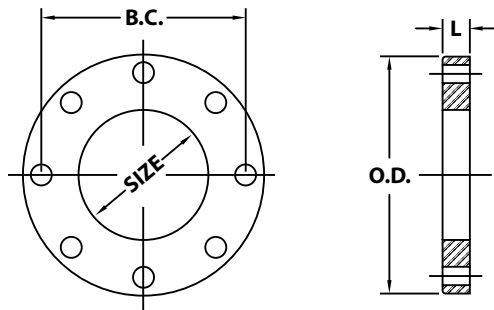


Flanges

ANSI/AWWA C110/A21.10



MJ THREADED BELL FOR DUCTILE PIPE (DUCTILE IRON)										
NOM. SIZE	OD PIPE	FLANGE THK. A	TOTAL THK. B	THREAD LENGTH	OD FLANGE O.D.	HUB DIA. C	BOLT CIRCLE B.C.	BOLT HOLE THREADS (UNC-2A)	NO. OF BOLT HOLES	WT (LBS.)
3	3.96	0.94	4.12	0.94	7.69	4.50	6.19	5/8 - 11	4	11
4	4.80	1.00	4.25	1.00	9.12	5.32	7.50	3/4 - 10	4	15
6	6.90	1.06	4.43	1.16	11.12	7.56	9.50	3/4 - 10	6	22
8	9.05	1.12	4.75	1.38	13.37	9.73	11.75	3/4 - 10	6	35
10	11.10	1.19	4.87	1.50	15.69	12.06	14.00	3/4 - 10	8	46
12	13.20	1.25	5.12	1.75	17.94	14.16	16.25	3/4 - 10	8	55
14	15.30	1.31	6.50	1.87	20.31	16.25	18.75	3/4 - 10	10	94
16	17.40	1.38	6.75	2.06	22.56	18.44	21.00	3/4 - 10	12	118
18	19.50	1.44	7.00	2.25	24.83	20.53	23.25	3/4 - 10	12	125
20	21.60	1.50	7.25	2.44	27.08	22.63	25.50	3/4 - 10	14	150
24	25.80	1.62	7.50	2.75	31.58	26.82	30.00	3/4 - 10	16	235
30	32.00	1.81	9.13	3.37	39.12	32.75	36.88	1 - 8	20	375
36	38.30	2.00	9.75	4.00	46.00	39.12	43.75	1 - 8	24	500
42	44.50	2.00	10.50	4.00	53.12	46.00	50.62	1 1/4 - 7	28	735
48	50.80	2.00	11.00	4.12	60.00	52.25	57.50	1 1/4 - 7	32	940



FILLER FLANGES (DUCTILE IRON & CAST GRAY IRON)														
NOM. SIZE	OD FLANGE O.D.	BOLT CIRCLE B.C.	BOLT HOLE DIA.	NO. OF BOLT HOLES	WT. (LBS.)									
					1/2	3/4	1	1 1/2	2	3	4	5	6	
3	7.50	6.00	3/4	4	5	7	9	14	18	27	36	45	54	
4	9.00	7.50	3/4	8	6	9	12	19	25	37	49	62	74	
6	11.00	9.50	7/8	8	8	12	16	24	32	48	64	81	97	
8	13.50	11.75	7/8	8	11	17	23	34	46	69	92	114	137	
10	16.00	14.25	1	12	15	22	29	44	59	88	118	147	176	
12	19.00	17.00	1	12	21	31	42	63	84	126	167	209	251	
14	21.00	18.75	1.12	12	23	35	47	70	94	141	188	235	282	
16	23.50	21.25	1.12	16	28	42	56	85	113	169	225	282	338	
18	25.00	22.75	1.25	16	28	42	56	85	113	169	225	282	338	
20	27.50	25.00	1.25	20	33	50	66	100	133	199	265	332	398	
24	32.00	29.50	1.38	20	42	63	84	126	167	251	335	419	502	
30	38.75	36.00	1.38	28	56	84	112	168	224	336	448	560	672	
36	46.00	42.75	1.63	32	75	113	150	225	300	450	601	751	901	

STAR[®] PIPE PRODUCTS

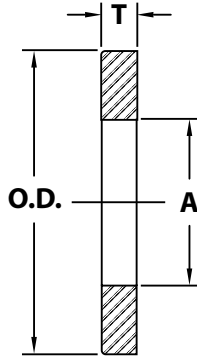
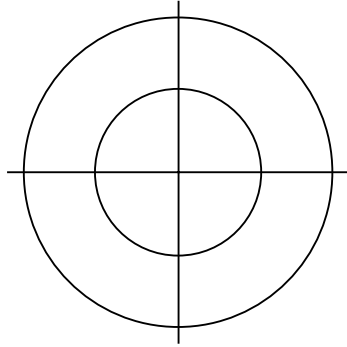




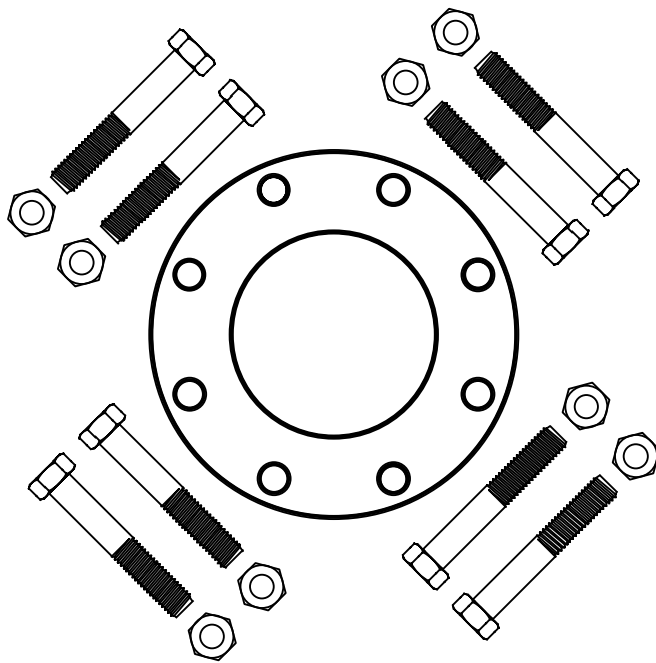
Flanges

ANSI/AWWA C110/A21.10

STAR® PIPE PRODUCTS



DUCTILE IRON ANCHOR FLANGES				
NOM. SIZE	THICKNESS T	OD FLANGE O.D.	ID FLANGE A	WT (LBS.)
3	0.50	6.50	4.03	3
4	0.50	7.40	4.87	4
6	0.50	9.50	6.97	5
8	0.50	12.00	9.13	7
10	0.50	14.10	11.17	8
12	0.50	16.25	13.27	10
14	0.50	18.40	15.38	12
16	0.50	21.00	17.48	15
18	0.50	23.10	19.59	17
20	0.50	25.70	21.69	21
24	0.50	30.00	25.90	25
30	0.63	37.00	32.10	47
36	0.63	43.40	38.40	53
42	1.00	50.00	44.62	104
48	1.00	56.50	50.94	122
54	{ Dimensions Available On Request }			



FLANGE ACCESSORY PACKS W/ 1/8" THICK RUBBER (ASTM D2000 TYPE A) GASKET, HEX BOLTS & NUTS (A-307) ZINC PLATED			
NOM. SIZE	BOLTS	QTY.	WT (LBS.)
1 1/2	1/2 x 2	4	1
2	5/8 x 2 1/4	4	1.4
2 1/2	5/8 x 2 1/2	4	1.8
3	5/8 x 2 1/2	4	2
4	5/8 x 3	8	3
5	3/4 x 3	8	5
6	3/4 x 3 1/2	8	5
8	3/4 x 3 1/2	8	6
10	7/8 x 4	12	12
12	7/8 x 4	12	13
14	1 x 4 1/2	12	19
16	1 x 4 1/2	16	25
18	1 1/8 x 5	16	35
20	1 1/8 x 5	20	45
24	1 1/4 x 5 1/2	20	63
30	1 1/4 x 6 1/2	28	95
36	1 1/2 x 7	32	170
42	1 1/2 x 8	36	215
48	1 1/2 x 8	44	265
54	1 3/4 x 8 1/2	44	390
60	1 3/4 x 9	52	500

