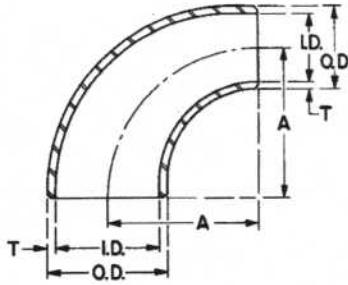


90° elbow long radius reducing



dimensions: All dimensions in inches and are in accordance with ASA B16.9.

pressure-temperature rating: Identical with those of seamless pipe of same size, thickness and material grade.

nominal pipe size		large end			small end			center to face A	weight (approx) lb
		outside diameter O. D.	inside diameter I. D.	wall thickness at T	outside diameter O. D.	inside diameter I. D.	wall thickness at T		
2	1½	2.375	2.067	.154	1.900	1.610	.145	3	1.5
	1¼	2.375	2.067	.154	1.660	1.380	.140	3	1.4
	1	2.375	2.067	.154	1.315	1.049	.133	3	1.3
2½	2	2.875	2.469	.203	2.375	2.067	.154	3¾	2.8
	1½	2.875	2.469	.203	1.900	1.610	.145	3¾	2.5
	1¼	2.875	2.469	.203	1.660	1.380	.140	3¾	2.3
3	2½	3.500	3.068	.216	2.875	2.469	.203	4½	4.3
	2	3.500	3.068	.216	2.375	2.067	.154	4½	4.0
	1½	3.500	3.068	.216	1.900	1.610	.145	4½	3.8
3½	3	4.000	3.548	.226	3.500	3.068	.216	5¼	6.0
	2½ ^m	4.000	3.548	.226	2.875	2.469	.203	5¼	5.5
	2 ^m	4.000	3.548	.226	2.375	2.067	.154	5¼	5.0
4	3½	4.500	4.026	.237	4.000	3.548	.226	6	8.5
	3	4.500	4.026	.237	3.500	3.068	.216	6	8.0
	2½	4.500	4.026	.237	2.875	2.469	.203	6	7.5
	2	4.500	4.026	.237	2.375	2.067	.154	6	7.0
5	4	5.563	5.047	.258	4.500	4.026	.237	7½	14.0
	3½ ^m	5.563	5.047	.258	4.000	3.548	.226	7½	13.0
	3	5.563	5.047	.258	3.500	3.068	.216	7½	12.5
	2½ ^m	5.563	5.047	.258	2.875	2.469	.203	7½	11.0
6	5	6.625	6.065	.280	5.563	5.047	.258	9	21.0
	4	6.625	6.065	.280	4.500	4.026	.237	9	20.0
	3½ ^m	6.625	6.065	.280	4.000	3.548	.226	9	19.0
	3	6.625	6.065	.280	3.500	3.068	.216	9	17.5
8	6	8.625	7.981	.322	6.625	6.065	.280	12	40.0
	5 ^m	8.625	7.981	.322	5.563	5.047	.256	12	37.5
	4 ^m	8.625	7.981	.322	4.500	4.026	.237	12	35.0
10	8 ^m	10.750	10.020	.365	8.625	7.981	.322	15	76
	6 ^m	10.750	10.020	.365	6.625	6.065	.280	15	67
	5 ^m	10.750	10.020	.365	5.563	5.047	.258	15	62
12	10 ^m	12.750	12.000	.375	10.750	10.020	.365	18	110
	8 ^m	12.750	12.000	.375	8.625	7.981	.322	18	102
	6 ^m	12.750	12.000	.375	6.625	6.065	.280	18	90
14	12 ^m	14.000	13.250	.375	12.750	12.000	.375	21	137
	10 ^m	14.000	13.250	.375	10.750	10.020	.365	21	127
	8 ^m	14.000	13.250	.375	8.625	7.981	.322	21	115
16	14 ^m	16.000	15.250	.375	14.000	13.250	.375	24	177
	12 ^m	16.000	15.250	.375	12.750	12.000	.375	24	169
	10 ^m	16.000	15.250	.375	10.750	10.020	.365	24	157
18	16 ^m	18.000	17.250	.375	16.000	15.250	.375	27	238
	14 ^m	18.000	17.250	.375	14.000	13.250	.375	27	228
	12 ^m	18.000	17.250	.375	12.750	12.000	.375	27	218
	10 ^m	18.000	17.250	.375	10.750	10.020	.365	27	208
20	18 ^m	20.000	19.250	.375	18.000	17.250	.375	30	305
	16 ^m	20.000	19.250	.375	16.000	15.250	.375	30	295
	14 ^m	20.000	19.250	.375	14.000	13.250	.375	30	280
	12 ^m	20.000	19.250	.375	12.750	12.000	.375	30	265
	10 ^m	20.000	19.250	.375	10.750	10.020	.365	30	250
24	22 ^m	24.000	23.250	.375	22.000	21.250	.375	36	428
	20 ^m	24.000	23.250	.375	20.000	19.250	.375	36	410
	18 ^m	24.000	23.250	.375	18.000	17.250	.375	36	395
	16 ^m	24.000	23.250	.375	16.000	15.250	.375	36	376
	14 ^m	24.000	23.250	.375	14.000	13.250	.375	36	362
	12 ^m	24.000	23.250	.375	12.750	12.000	.375	36	353

90° elbow

long radius reducing

nominal pipe size	large end			small end			center to face A	weight (approx) lb	
	outside diameter O. D.	inside diameter I. D.	wall thickness at T	outside diameter O. D.	inside diameter I. D.	wall thickness at T			
extra strong									
2	1½	2.375	1.939	.218	1.900	1.500	.200	3	2.0
	1¼	2.375	1.939	.218	1.660	1.287	.191	3	1.8
	1	2.375	1.939	.218	1.315	.957	.179	3	1.5
2½	2	2.875	2.323	.276	2.375	1.939	.218	3¼	3.8
	1½	2.875	2.323	.276	1.900	1.500	.200	3¼	3.5
	1¼	2.875	2.323	.276	1.660	1.278	.191	3¼	3.3
3	2½	3.500	2.900	.300	2.875	2.323	.276	4½	6.0
	2	3.500	2.900	.300	2.375	1.939	.218	4½	5.5
	1½	3.500	2.900	.300	1.900	1.500	.200	4½	5.0
3½	3	4.000	3.364	.318	3.500	2.900	.300	5¼	8.3
	2½	4.000	3.364	.318	2.875	2.323	.276	5¼	7.8
	2	4.000	3.364	.318	2.375	1.939	.218	5¼	7.0
4	3½	4.500	3.826	.337	4.000	3.364	.318	6	11.5
	3	4.500	3.826	.337	3.500	2.900	.300	6	10.8
	2½	4.500	3.826	.337	2.875	2.323	.276	6	10.0
	2	4.500	3.826	.377	2.375	1.939	.218	6	9.3
5	4	5.563	4.813	.375	4.500	3.826	.337	7½	19.5
	3½	5.563	4.813	.375	4.000	3.364	.318	7½	18.0
	3	5.563	4.813	.375	3.500	2.900	.300	7½	16.5
	2½	5.563	4.813	.375	2.875	2.323	.276	7½	15.5
6	5	6.625	5.761	.432	5.563	4.813	.375	9	32.0
	4	6.625	5.761	.432	4.500	3.826	.337	9	30.0
	3½	6.625	5.761	.432	4.000	3.364	.318	9	28.0
	3	6.625	5.761	.432	3.500	2.900	.300	9	26.0
8	6	8.625	7.625	.500	6.625	5.761	.432	12	61
	5	8.625	7.625	.500	5.563	4.813	.375	12	57
	4	8.625	7.625	.500	4.500	3.826	.337	12	53
10	8	10.750	9.750	.500	8.625	7.625	.500	15	98
	6	10.750	9.750	.500	6.625	5.761	.432	15	88
	5	10.750	9.750	.500	5.563	4.813	.375	15	83
12	10	12.750	11.750	.500	10.750	9.750	.500	18	150
	8	12.750	11.750	.500	8.625	7.625	.500	18	128
	6	12.750	11.750	.500	6.625	5.761	.432	18	117
14	12	14.000	13.000	.500	12.750	11.750	.500	21	180
	10	14.000	13.000	.500	10.750	9.750	.500	21	166
	8	14.000	13.000	.500	8.625	7.625	.500	21	151
16	14	16.000	15.000	.500	14.000	13.000	.500	24	231
	12	16.000	15.000	.500	12.750	11.750	.500	24	221
	10	16.000	15.000	.500	10.750	9.750	.500	24	205
18	16	18.000	17.000	.500	16.000	15.000	.500	27	320
	14	18.000	17.000	.500	14.000	13.000	.500	27	310
	12	18.000	17.000	.500	12.750	11.750	.500	27	300
	10	18.000	17.000	.500	10.750	9.750	.500	27	290
20	18	20.000	19.000	.500	18.000	17.000	.500	30	400
	16	20.000	19.000	.500	16.000	15.000	.500	30	385
	14	20.000	19.000	.500	14.000	13.000	.500	30	365
	12	20.000	19.000	.500	12.750	11.750	.500	30	350
	10	20.000	19.000	.500	10.750	9.750	.500	30	325
24	22	24.000	23.000	.500	22.000	21.000	.500	36	567
	20	24.000	23.000	.500	20.000	19.000	.500	36	544
	18	24.000	23.000	.500	18.000	17.000	.500	36	523
	16	24.000	23.000	.500	16.000	15.000	.500	36	499
	14	24.000	23.000	.500	14.000	13.000	.500	36	480
	12	24.000	23.000	.500	12.750	11.750	.500	36	466