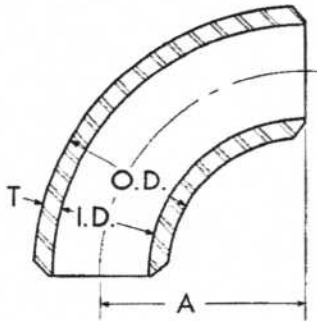


90° elbow long radius



dimensions: All dimensions in inches and are in accordance with ASA B16.9 and MSS-SP-48 where established.

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

footnotes: *Pipe schedule numbers in accordance with ASA B36.10.

▲This size and thickness does not correspond with any schedule number.

nominal pipe size	outside diameter O.D.	inside diameter I.D.	wall thickness T	center to face A	pipe schedule number*	weight (approx) lb
standard						
1/2	.840	.622	.109	1 1/2	40	.2
3/4	1.050	.824	.113	1 3/4	40	.2
1	1.315	1.049	.133	1 1/2	40	.4
1 1/4	1.660	1.380	.140	1 3/4	40	.6
1 1/2	1.900	1.610	.145	2 1/4	40	.9
2	2.375	2.067	.154	3	40	1.5
2 1/2	2.875	2.469	.203	3 3/4	40	3.0
3	3.500	3.068	.216	4 1/2	40	4.7
3 1/2	4.000	3.548	.226	5 1/4	40	6.7
4	4.500	4.026	.237	6	40	8.7
5	5.563	5.047	.258	7 1/2	40	16.0
6	6.625	6.065	.280	9	40	22.8
8	8.625	7.981	.322	12	40	44.9
10	10.750	10.202	.365	15	40	84.0
12	12.750	12.000	.375	18	▲	122.0
14	14.000	13.250	.375	21	30	157
16	16.000	15.250	.375	24	30	208
18	18.000	17.250	.375	27	▲	256
20	20.000	19.250	.375	30	20	322
22	22.000	21.250	.375	33	▲	385
24	24.000	23.250	.375	36	20	500
26	26.000	25.250	.375	39	▲	602
28	28.000	27.250	.375	42	▲	626
30	30.000	29.250	.375	45	▲	775
32	32.000	31.250	.375	48	▲	818
34	34.000	33.250	.375	51	▲	926
36	36.000	35.250	.375	54	▲	1040
42	42.000	41.250	.375	63	▲	1420

90° elbow

long radius

nominal pipe size	outside diameter O.D.	inside diameter I.D.	wall thickness T	center to face A	pipe schedule number*	weight (approx) lb
extra strong						
1/2	.840	.546	.147	1 1/2	80	.3
3/4	1.050	.742	.154	1 5/8	80	.3
1	1.315	.957	.179	1 1/2	80	.4
1 1/4	1.600	1.278	.191	1 5/8	80	.8
1 1/2	1.900	1.500	.200	2 1/4	80	1.2
2	2.375	1.939	.218	3	80	2.1
2 1/2	2.875	2.323	.276	3 3/4	80	3.8
3	3.500	2.900	.300	4 1/2	80	6.0
3 1/2	4.000	3.364	.318	5 1/4	80	8.7
4	4.500	3.826	.337	6	80	12.0
5	5.563	4.813	.375	7 1/2	80	21.4
6	6.625	5.761	.432	9	80	32.2
8	8.625	7.625	.500	12	80	70.3
10	10.750	9.750	.500	15	60	112.0
12	12.750	11.750	.500	18	▲	156.0
14	14.000	13.000	.500	21	▲	200
16	16.000	15.000	.500	24	40	270
18	18.000	17.000	.500	27	▲	332
20	20.000	19.000	.500	30	30	438
22	22.000	21.000	.500	33	▲	508
24	24.000	23.000	.500	36	▲	578
26	26.000	25.000	.500	39	▲	713
28	28.000	27.000	.500	42	▲	829
30	30.000	29.000	.500	45	20	953
32	32.000	31.000	.500	48	▲	1090
34	34.000	33.000	.500	51	▲	1230
36	36.000	35.000	.500	54	▲	1380
42	42.000	41.000	.500	63	▲	1880

schedule 160

1	1.315	.815	.250	1 1/2	160	.6
1 1/4	1.660	1.160	.250	1 5/8	160	1.0
1 1/2	1.900	1.338	.281	2 1/4	160	1.5
2	2.375	1.689	.343	3	160	3.0
2 1/2	2.875	2.185	.375	3 3/4	160	5.0
3	3.500	2.624	.438	4 1/2	160	8.5
4	4.500	3.438	.531	6	160	18
5	5.563	4.313	.625	7 1/2	160	33
6	6.625	5.189	.718	9	160	55
8	8.625	6.813	.906	12	160	120
10	10.750	8.500	1.125	15	160	230
12	12.750	10.126	1.312	18	160	375

double extra strong

3/4	1.050	.434	.308	1 5/8	▲	.5
1	1.315	.599	.358	1 1/2	▲	1.0
1 1/4	1.660	.896	.382	1 5/8	▲	1.3
1 1/2	1.900	1.100	.400	2 1/4	▲	2.0
2	2.375	1.503	.436	3	▲	4.0
2 1/2	2.875	1.771	.552	3 3/4	▲	7.0
3	3.500	2.300	.600	4 1/2	▲	11.0
3 1/2	4.000	2.728	.636	5 1/4	▲	15.0
4	4.500	3.152	.674	6	▲	20.5
5	5.563	4.063	.750	7 1/2	▲	34
6	6.625	4.897	.864	9	▲	62
8	8.625	6.875	.875	12	▲	120