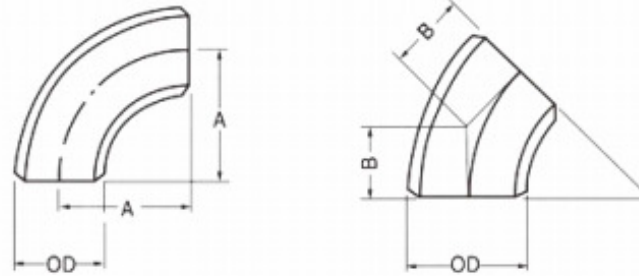


SPECIFICATION

**Long Radius Elbows(45° 90°)**

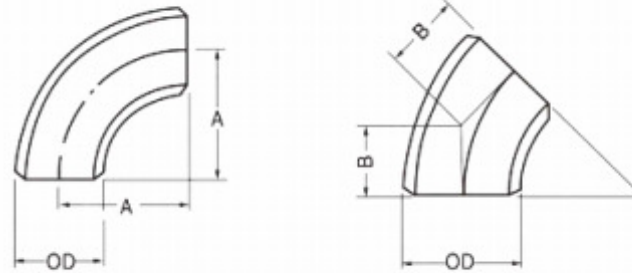


ASME/ANSI B16.9

Nominal Pipe Size		Outside Diameter at Bevel,OD	Center-to-End	
DN	NPS		90 deg Elbows,A	45 deg Elbows,B
15	1/2"	21.3	38	16
20	3/4"	26.7	38	19
25	1"	33.4	38	22
32	1-1/4"	42.2	48	25
40	1-1/2"	48.3	57	29
50	2"	60.3	76	35
65	2-1/2"	73	95	44
80	3"	88.9	114	51
90	3-1/2"	101.6	133	57
100	4"	114.3	152	64
125	5"	141.3	190	79
150	6"	168.3	229	95
200	8"	219.1	305	127
250	10"	273	381	159
300	12"	323.8	457	190
350	14"	355.6	533	222
400	16"	406.4	610	254
450	18"	457	686	286
500	20"	508	762	318
550	22"	559	838	343
600	24"	610	914	381

SPECIFICATION

**Long Radius Elbows(45° 90°)**



ASME/ANSI B16.9

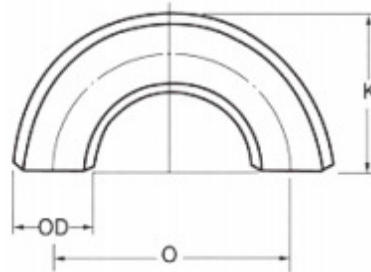
Nominal Pipe Size		Outside Diameter at Bevel,OD	Center-to-End	
DN	NPS		90 deg Elbows,A	45 deg Elbows,B
650	26"	660	991	406
700	28"	711	1067	438
750	30"	762	1143	470
800	32"	813	1219	502
850	34"	864	1295	533
900	36"	914	1372	565
950	38"	965	1448	600
1000	40"	1016	1524	632
1050	42"	1067	1600	660
1100	44"	1118	1676	695
1150	46"	1168	1753	727
1200	48"	1219	1829	759

Note:

•All dimensions are in millimeters

SPECIFICATION

**Long Radius Elbows(180°)**

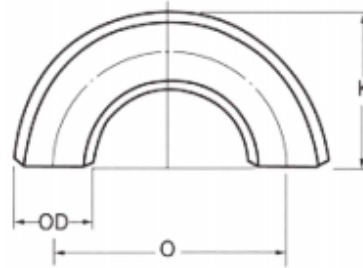


ASME/ANSI B16.9

Nominal Pipe Size		Outside Diameter at Bevel, OD	Center-to-Center	Back-to-Face
DN	NPS		O	K
15	1/2"	21.3	76	48
20	3/4"	26.7	76	51
25	1"	33.4	76	56
32	1-1/4"	42.2	95	70
40	1-1/2"	48.3	114	83
50	2"	60.3	152	106
65	2-1/2"	73	190	132
80	3"	88.9	229	159
90	3-1/2"	101.6	267	184
100	4"	114.3	305	210
125	5"	141.3	381	262
150	6"	168.3	457	313
200	8"	219.1	610	414
250	10"	273	762	518
300	12"	323.8	914	619
350	14"	355.6	1067	711
400	16"	406.4	1219	813
450	18"	457	1372	914
500	20"	508	1524	1016

SPECIFICATION

**Long Radius Elbows(180°)**



ASME/ANSI B16.9

Nominal Pipe Size		Outside Diameter at Bevel, OD	Center-to-Center	Back-to-Face
DN	NPS		O	K
550	22"	559	1676	1118
600	24"	610	1829	1219

Note:

- All dimensions are in millimeters