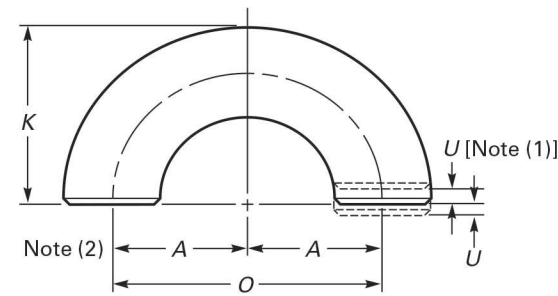


Dimensions of Long Radius Returns



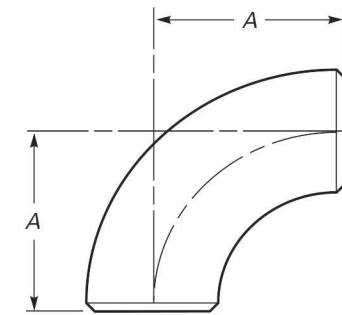
Nominal Pipe Size (NPS)	Outside Diameter at Bevel	Center-to-Center, O	Back-to-Face, K
1/2	21.3	76	48
3/4	26.7	76	51
1	33.4	76	56
1 1/4	42.2	95	70
1 1/2	48.3	114	83
2	60.3	152	106
2 1/2	73.0	190	132
3	88.9	229	159
3 1/2	101.6	267	184
4	114.3	305	210
5	141.3	381	262
6	168.3	457	313
8	219.1	610	414
10	273.0	762	518
12	323.8	914	619
14	355.6	1 067	711
16	406.4	1 219	813
18	457.0	1 372	914
20	508.0	1 524	1 016
22	559.0	1 676	1 118
24	610.0	1 829	1 219

GENERAL NOTE: All dimensions are in millimeters.

NOTES:

- (1) See Table 13 for tolerance for alignment of ends U.
- (2) Dimension A is equal to one-half of dimension O.

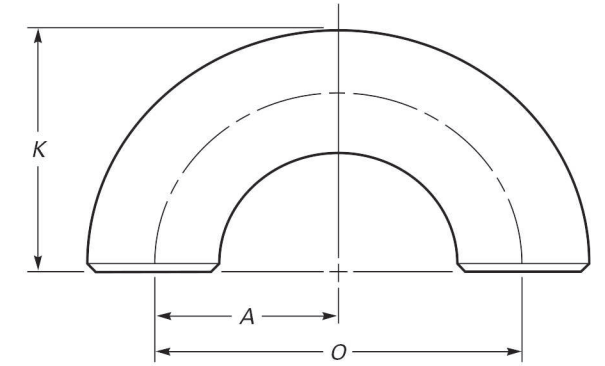
Dimensions of Short Radius Elbows



Nominal Pipe Size (NPS)	Outside Diameter at Bevel	Center-to-End, A
1	33.4	25
1 1/4	42.2	32
1 1/2	48.3	38
2	60.3	51
2 1/2	73.0	64
3	88.9	76
3 1/2	101.6	89
4	114.3	102
5	141.3	127
6	168.3	152
8	219.1	203
10	273.0	254
12	323.8	305
14	355.6	356
16	406.4	406
18	457.0	457
20	508.0	508
22	559.0	559
24	610.0	610

GENERAL NOTE: All dimensions are in millimeters.

Dimensions of Short Radius 180-deg Returns



Nominal Pipe Size (NPS)	Outside Diameter at Bevel	Center-to-Center, O	Back-to-Face, K
1	33.4	51	41
1 1/4	42.2	64	52
1 1/2	48.3	76	62
2	60.3	102	81
2 1/2	73.0	127	100
3	88.9	152	121
3 1/2	101.6	178	140
4	114.3	203	159
5	141.3	254	197
6	168.3	305	237
8	219.1	406	313
10	273.0	508	391
12	323.8	610	467
14	355.6	711	533
16	406.4	813	610
18	457.0	914	686
20	508.0	1 016	762
22	559.0	1 118	838
24	610.0	1 219	914

GENERAL NOTES:

- (a) All dimensions are in millimeters.
- (b) Dimension A is equal to one-half of dimension O.