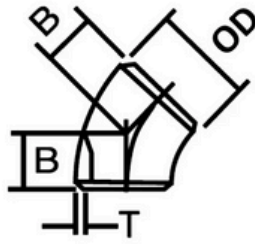
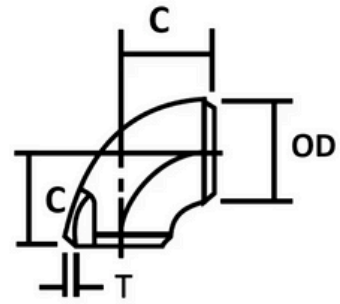


90° Elbow  
long radius



45° Elbow



90° Elbow  
short radius

Nominal Pipe Size (NPS)	Outside Diameter (OD)	Center to End (A)	Center to Center (B)	Radius (R)	Wall Thickness (T)
1/2"	21.3 mm	38 mm	76 mm	1D/1.5D/2D	2.77 mm
3/4"	26.7 mm	38 mm	76 mm	1D/1.5D/2D	2.87 mm
1"	33.4 mm	38 mm	76 mm	1D/1.5D/2D	3.38 mm
1-1/4"	42.2 mm	48 mm	96 mm	1D/1.5D/2D	3.56 mm
1-1/2"	48.3 mm	57 mm	114 mm	1D/1.5D/2D	3.68 mm
2"	60.3 mm	76 mm	152 mm	1D/1.5D/2D	3.91 mm
2-1/2"	73.0 mm	95 mm	190 mm	1D/1.5D/2D	5.16 mm
3"	88.9 mm	114 mm	228 mm	1D/1.5D/2D	5.49 mm
3-1/2"	101.6 mm	133 mm	266 mm	1D/1.5D/2D	5.74 mm
4"	114.3 mm	152 mm	304 mm	1D/1.5D/2D	6.02 mm
5"	141.3 mm	190 mm	380 mm	1D/1.5D/2D	6.55 mm
6"	168.3 mm	229 mm	458 mm	1D/1.5D/2D	7.11 mm
8"	219.1 mm	305 mm	610 mm	1D/1.5D/2D	8.18 mm
10"	273.0 mm	381 mm	762 mm	1D/1.5D/2D	9.27 mm
12"	323.8 mm	457 mm	914 mm	1D/1.5D/2D	10.31 mm
14"	355.6 mm	533 mm	1066 mm	1D/1.5D/2D	11.13 mm
16"	406.4 mm	610 mm	1220 mm	1D/1.5D/2D	12.70 mm
18"	457.2 mm	686 mm	1372 mm	1D/1.5D/2D	14.27 mm
20"	508.0 mm	762 mm	1524 mm	1D/1.5D/2D	15.88 mm
24"	609.6 mm	914 mm	1828 mm	1D/1.5D/2D	18.26 mm