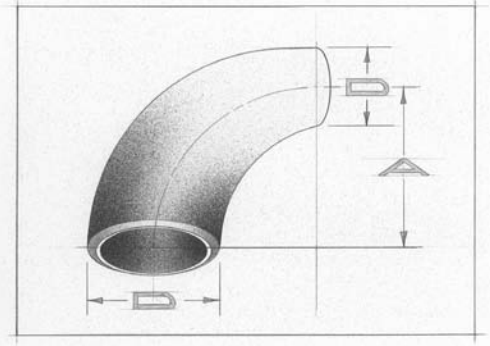
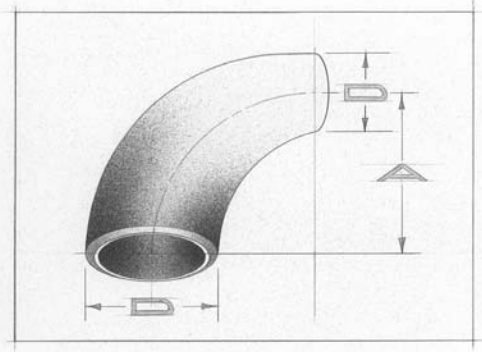


Long Radius Reducing **ELBOWS**



Key									
Reducing Sizes		Nominal Pipe Size		"D" Outside Diameter at Bevel				"A" Center-to-End	
				Large End		Small End			
inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
-	-	1	25.40	-	-	-	-	-	-
-	-	1¼	31.75	-	-	-	-	-	-
-	-	1½	38.10	-	-	-	-	-	-
2 x 1½ 2 x 1¼ 2 x 1	50.80 x 38.10 50.80 x 31.75 50.80 x 25.40	2	50.80	2.38 2.38 2.38	60.45 60.45 60.45	1.90 1.66 1.32	48.26 42.16 33.53	3.00 3.00 3.00	76.20 76.20 76.20
2½ x 2 2½ x 1½ 2½ x 1¼	63.50 x 50.80 63.50 x 38.10 63.50 x 31.75	2½	63.50	2.88 2.88 2.88	73.15 73.15 73.15	2.38 1.90 1.66	60.45 48.26 42.16	3.75 3.75 3.75	95.25 95.25 95.25
3 x 2½ 3 x 2 3 x 1½	76.20 x 63.50 76.20 x 50.80 76.20 x 38.10	3	76.20	3.50 3.50 3.50	88.90 88.90 88.90	2.88 2.38 1.90	73.15 60.45 48.26	4.50 4.50 4.50	114.30 114.30 114.30
3½ x 3 3½ x 2½ 3½ x 2	88.90 x 76.20 88.90 x 63.50 88.90 x 50.80	3½	88.90	4.00 4.00 4.00	101.60 101.60 101.60	3.50 2.88 2.38	88.90 73.15 60.45	5.25 5.25 5.25	133.35 133.35 133.35
4 x 3½ 4 x 3 4 x 2½ 4 x 2	101.60 x 88.90 101.60 x 76.20 101.60 x 63.50 101.60 x 50.80	4	101.60	4.50 4.50 4.50 4.50	114.30 114.30 114.30 114.30	4.00 3.50 2.88 2.38	101.60 88.90 73.15 60.45	6.00 6.00 6.00 6.00	152.40 152.40 152.40 152.40
5 x 4 5 x 3½ 5 x 3 5 x 2½	127.00 x 101.60 127.00 x 88.90 127.00 x 76.20 127.00 x 63.50	5	127.00	5.56 5.56 5.56 5.56	141.22 141.22 141.22 141.22	4.50 4.00 3.50 2.88	114.30 101.60 88.90 73.15	7.50 7.50 7.50 7.50	190.50 190.50 190.50 190.50
6 x 5 6 x 4 6 x 3½ 6 x 3	152.40 x 127.00 152.40 x 101.60 152.40 x 88.90 152.40 x 76.20	6	152.40	6.63 6.63 6.63 6.63	168.40 168.40 168.40 168.40	5.56 4.50 4.00 3.50	141.22 114.30 101.60 88.90	9.00 9.00 9.00 9.00	228.60 228.60 228.60 228.60

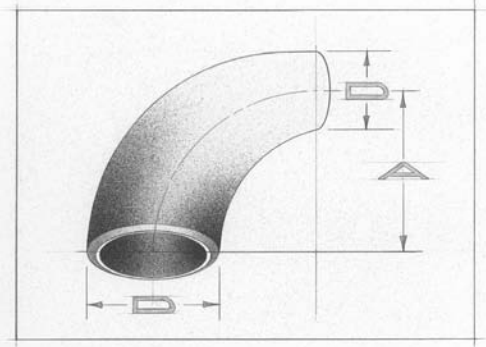
Long Radius Reducing ELBOWS



Key		Nominal Wall Thickness: inches mm Inside Diameter: inches mm Weight: Call factory for weights													
		Reducing Sizes		Schedule											
inches	mm	L.W.G.	10	20	30	40	STD WT	60	XS	80	100	120	140	160	XXS
-	-	-	-	-	-	.133 3.378 1.049 26.645	.133 3.378 1.049 26.645	-	.179 4.547 .957 24.308	.179 4.547 .957 24.308	-	-	-	.250 6.350 .815 20.701	.358 9.093 .599 15.215
-	-	-	-	-	-	.140 3.556 1.380 35.052	.140 3.556 1.380 35.052	-	.191 4.851 1.278 32.461	.191 4.851 1.278 32.461	-	-	-	.250 6.350 1.160 29.464	.382 9.703 .896 22.758
-	-	-	-	-	-	.145 3.683 1.610 40.894	.145 3.683 1.610 40.894	-	.200 5.080 1.500 38.100	.200 5.080 1.500 38.100	-	-	-	.281 7.137 1.338 33.985	.400 10.160 1.100 27.940
2 x 1½ 2 x 1¼ 2 x 1	50.80 x 38.10 50.80 x 31.75 50.80 x 25.40	-	-	-	-	.154 3.912 2.067 52.502	.154 3.912 2.067 52.502	-	.218 5.537 1.939 49.251	.218 5.537 1.939 49.251	-	-	-	.344 8.738 1.687 42.850	.436 11.074 1.503 38.176
2½ x 2 2½ x 1½ 2½ x 1¼	63.50 x 50.80 63.50 x 38.10 63.50 x 31.75	-	-	-	-	.203 5.156 2.469 62.713	.203 5.156 2.469 62.713	-	.276 7.010 2.323 59.004	.276 7.010 2.323 59.004	-	-	-	.375 9.525 2.125 53.975	.552 14.021 1.771 44.983
3 x 2½ 3 x 2 3 x 1½	76.20 x 63.50 76.20 x 50.80 76.20 x 38.10	-	-	-	-	.216 5.486 3.068 77.927	.216 5.486 3.068 77.927	-	.300 7.620 2.900 73.660	.300 7.620 2.900 73.660	-	-	-	.438 11.125 2.624 66.650	.600 15.240 2.300 58.420
3½ x 3 3½ x 2½ 3½ x 2	88.90 x 76.20 88.90 x 63.50 88.90 x 50.80	-	-	-	-	.226 5.740 3.548 90.119	.226 5.740 3.548 90.119	-	.318 8.077 3.364 85.446	.318 8.077 3.364 85.446	-	-	-	-	.636* 16.154 2.728 69.291
4 x 3½ 4 x 3 4 x 2½ 4 x 2	101.60 x 88.90 101.60 x 76.20 101.60 x 63.50 101.60 x 50.80	.188 4.775 4.124 104.749	-	-	-	.237 6.020 4.026 102.260	.237 6.020 4.026 102.260	-	.337 8.560 3.826 97.180	.337 8.560 3.826 97.180	-	.438 11.125 3.624 92.050	-	.531 13.487 3.438 87.325	.674 17.120 3.152 80.061
5 x 4 5 x 3½ 5 x 3 5 x 2½	127.00 x 101.60 127.00 x 88.90 127.00 x 76.20 127.00 x 63.50	-	-	-	-	.258 6.553 5.047 128.194	.258 6.553 5.047 128.194	-	.375 9.525 4.813 122.250	.375 9.525 4.813 122.250	-	.500 12.700 4.563 115.900	-	.625 15.875 4.313 109.550	.750 19.050 4.063 103.200
6 x 5 6 x 4 6 x 3½ 6 x 3	152.40 x 127.00 152.40 x 101.60 152.40 x 88.90 152.40 x 76.20	.219 5.563 6.187 157.150	-	-	-	.280 7.112 6.065 154.051	.280 7.112 6.065 154.051	-	.432 10.973 5.761 146.329	.432 10.973 5.761 146.329	-	.562 14.275 5.501 139.725	-	.719 18.263 5.187 131.750	.864 21.946 4.897 124.384

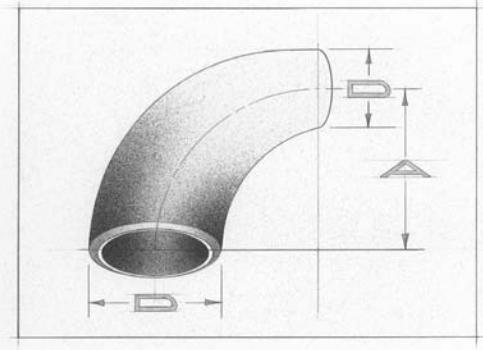
*Not given in ASME B36.10

Long Radius Reducing **ELBOWS**



Key									
Reducing Sizes		Nominal Pipe Size		"D" Outside Diameter at Bevel				"A" Center-to-End	
				Large End		Small End			
inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
8 x 6 8 x 5 8 x 4	203.20 x 152.40 203.20 x 127.00 203.20 x 101.60	8	203.20	8.63 8.63 8.63	219.20 219.20 219.20	6.63 5.56 4.50	168.40 141.22 114.30	12.00 12.00 12.00	304.80 304.80 304.80
10 x 8 10 x 6 10 x 5	254.00 x 203.20 254.00 x 152.40 254.00 x 127.00	10	254.00	10.75 10.75 10.75	273.05 273.05 273.05	8.63 6.63 5.56	219.20 168.40 141.22	15.00 15.00 15.00	381.00 381.00 381.00
12 x 10 12 x 8 12 x 6	304.80 x 254.00 304.80 x 203.20 304.80 x 152.40	12	304.80	12.75 12.75 12.75	323.85 323.85 323.85	10.75 8.63 6.63	273.05 219.20 168.40	18.00 18.00 18.00	457.20 457.20 457.20
14 x 12 14 x 10 14 x 8	355.60 x 304.80 355.60 x 254.00 355.60 x 203.20	14	355.60	14.00 14.00 14.00	355.60 355.60 355.60	12.75 10.75 8.63	323.85 273.05 219.20	21.00 21.00 21.00	533.40 533.40 533.40
16 x 14 16 x 12 16 x 10	406.40 x 355.60 406.40 x 304.80 406.40 x 254.00	16	406.40	16.00 16.00 16.00	406.40 406.40 406.40	14.00 12.75 10.75	355.60 323.85 273.05	24.00 24.00 24.00	609.60 609.60 609.60
18 x 16 18 x 14 18 x 12 18 x 10	457.20 x 406.40 457.20 x 355.60 457.20 x 304.80 457.20 x 254.00	18	457.20	18.00 18.00 18.00 18.00	457.20 457.20 457.20 457.20	16.00 14.00 12.75 10.75	406.40 355.60 323.85 273.05	27.00 27.00 27.00 27.00	685.80 685.80 685.80 685.80
20 x 18 20 x 16 20 x 14 20 x 12 20 x 10	508.00 x 457.20 508.00 x 406.40 508.00 x 355.60 508.00 x 304.80 508.00 x 254.00	20	508.00	20.00 20.00 20.00 20.00 20.00	508.00 508.00 508.00 508.00 508.00	18.00 16.00 14.00 12.75 10.75	457.20 406.40 355.60 323.85 273.05	30.00 30.00 30.00 30.00 30.00	762.00 762.00 762.00 762.00 762.00
-	-	22	558.80	-	-	-	-	-	-
24 x 22 24 x 20 24 x 18 24 x 16 24 x 14 24 x 12	609.60 x 558.80 609.60 x 508.00 609.60 x 457.20 609.60 x 406.40 609.60 x 355.60 609.60 x 304.80	24	609.60	24.00 24.00 24.00 24.00 24.00 24.00	609.60 609.60 609.60 609.60 609.60 609.60	22.00 20.00 18.00 16.00 14.00 12.75	558.80 508.00 457.20 406.40 355.60 323.85	36.00 36.00 36.00 36.00 36.00 36.00	914.40 914.40 914.40 914.40 914.40 914.40

Long Radius Reducing ELBOWS



Key		Nominal Wall Thickness: inches mm Inside Diameter: inches mm Weight: Call factory for weights													
		Reducing Sizes		Schedule											
inches	mm	L.W.G.	10	20	30	40	STD WT	60	XS	80	100	120	140	160	XXS
8 x 6	203.20 x 152.40	.219	-	.250	.277	.322	.322	.406	.500	.500	.594	.719	.812	.906	.875
8 x 5	203.20 x 127.00	5.563	-	6.350	7.036	8.179	8.179	10.312	12.700	12.700	15.088	18.263	20.625	23.012	22.225
8 x 4	203.20 x 101.60	8.187	-	8.125	8.071	7.981	7.981	7.813	7.625	7.625	7.437	7.187	7.001	6.813	6.875
		207.949	-	206.375	205.003	202.717	202.717	198.450	193.675	193.675	188.900	182.550	177.825	173.050	174.625
10 x 8	254.00 x 203.20	.219	-	.250	.307	.365	.365	.500	.500	.594	.719	.844	1.000	1.125	1.000
10 x 6	254.00 x 152.40	5.563	-	6.350	7.798	9.271	9.271	12.700	12.700	15.088	18.263	21.438	25.400	28.575	25.400
10 x 5	254.00 x 127.00	10.312	-	10.250	10.136	10.020	10.020	9.750	9.750	9.562	9.312	9.062	8.750	8.500	8.750
		261.925	-	260.350	257.454	254.508	254.508	247.650	247.650	242.875	236.525	230.175	222.250	215.900	222.250
12 x 10	304.80 x 254.00	.250	-	.250	.330	.406	.375	.562	.500	.688	.844	1.000	1.125	1.312	1.000
12 x 8	304.80 x 203.20	6.350	-	6.350	8.382	10.312	9.525	14.275	12.700	17.475	21.438	25.400	28.575	33.325	25.400
12 x 6	304.80 x 152.40	12.250	-	12.250	12.090	11.938	12.000	11.626	11.750	11.374	11.062	10.750	10.500	10.126	10.750
		311.150	-	311.150	307.086	303.225	304.800	295.300	298.450	288.900	280.975	273.050	266.700	257.200	273.050
14 x 12	355.60 x 304.80	.250	.250	.312	.375	.438	.375	.594	.500	.750	.938	1.094	1.250	1.406	-
14 x 10	355.60 x 254.00	6.350	6.350	7.925	9.525	11.125	9.525	15.088	12.700	19.050	23.825	27.788	31.750	35.712	-
14 x 8	355.60 x 203.20	13.500	13.500	13.376	13.250	13.124	13.250	12.812	13.000	12.500	12.124	11.812	11.500	11.188	-
		342.900	342.900	339.750	336.550	333.350	336.550	325.425	330.200	317.500	307.950	300.025	292.100	284.175	-
16 x 14	406.40 x 355.60	.250	.250	.312	.375	.500	.375	.656	.500	.844	1.031	1.219	1.438	1.594	-
16 x 12	406.40 x 304.80	6.350	6.350	7.925	9.525	12.700	9.525	16.662	12.700	21.438	26.187	30.963	36.525	40.488	-
16 x 10	406.40 x 254.00	15.500	15.500	15.376	15.250	15.000	15.250	14.688	15.000	14.312	13.938	13.562	13.124	12.812	-
		393.700	393.700	390.550	387.350	381.000	387.350	373.075	381.000	363.525	354.025	344.475	333.350	325.425	-
18 x 16	457.20 x 406.40	.250	.250	.312	.438	.562	.375	.750	.500	.938	1.156	1.375	1.562	1.781	-
18 x 14	457.20 x 355.60	6.350	6.350	7.925	11.125	14.275	9.525	19.050	12.700	23.825	29.362	34.925	39.675	45.237	-
18 x 12	457.20 x 304.80	17.500	17.500	17.376	17.124	16.876	17.250	16.500	17.000	16.124	15.688	15.250	14.876	14.438	-
18 x 10	457.20 x 254.00	444.500	444.500	441.350	434.950	428.650	438.150	419.100	431.800	409.550	398.475	387.350	377.850	366.725	-
20 x 18	508.00 x 457.20	.250	.250	.375	.500	.594	.375	.812	.500	1.031	1.281	1.500	1.750	1.969	-
20 x 16	508.00 x 406.40	6.350	6.350	9.525	12.700	15.088	9.525	20.625	12.700	26.187	32.537	38.100	44.450	50.013	-
20 x 14	508.00 x 355.60	19.500	19.500	19.250	19.000	18.812	19.250	18.376	19.000	17.938	17.438	17.000	16.500	16.062	-
20 x 12	508.00 x 304.80	495.300	495.300	488.950	482.600	477.825	488.950	466.750	482.600	455.625	442.925	431.800	419.100	407.975	-
20 x 10	508.00 x 254.00														-
-	-	-	.250	.375	.500	-	.375	.875	.500	1.125	1.375	1.625	1.875	2.125	-
		-	6.350	9.525	12.700	-	9.525	22.225	12.700	28.575	34.925	41.275	47.625	53.975	-
		-	21.500	21.250	21.000	-	21.250	20.250	21.000	19.750	19.250	18.750	18.250	17.750	-
		-	546.100	539.750	533.400	-	539.750	514.350	533.400	501.650	488.950	476.250	463.550	450.850	-
24 x 22	609.60 x 558.80	.250	.250	.375	.562	.688	.375	.969	.500	1.219	1.531	1.812	2.062	2.344	-
24 x 20	609.60 x 508.00	6.350	6.350	9.525	14.275	17.475	9.525	24.613	12.700	30.963	38.887	46.025	52.375	59.538	-
24 x 18	609.60 x 457.20	23.500	23.500	23.250	22.876	22.624	23.250	22.062	23.000	21.562	20.938	20.376	19.876	19.312	-
24 x 16	609.60 x 406.40	596.900	596.900	590.550	581.050	574.650	590.550	560.375	584.200	547.675	531.825	517.550	504.850	490.525	-
24 x 14	609.60 x 355.60														-
24 x 12	609.60 x 304.80														-