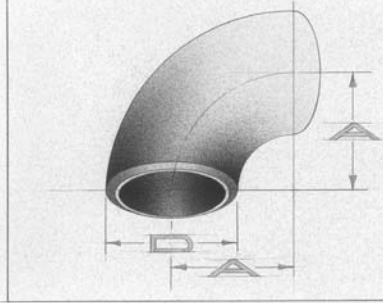


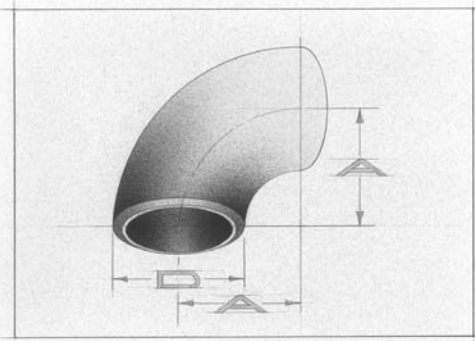
# Short Radius 90° ELBOWS



Key			Nominal Wall Thickness: inches mm Inside Diameter: inches mm Approximate Weight: Pounds (see page 3 for Kg)													
			Schedule													
Nominal Pipe Size	"D" Outside Diameter at Bevel	"A" Center-to-End	L.W.G.	10	20	30	40	STD WT	60	XS	80	100	120	140	160	XXS
inches mm	inches mm	inches mm														
½"	.84	-	-	-	-	-	.109	.109	-	.147	.147	-	-	-	.188	.294
			-	-	-	-	2.769	2.769	-	3.734	3.734	-	-	-	4.775	7.468
12.70	21.34	-	-	-	-	-	.622	.622	-	.546	.546	-	-	-	.464	.252
			-	-	-	-	15.799	15.799	-	13.868	13.868	-	-	-	11.786	6.401
¾"	1.05	-	-	-	-	-	.113	.113	-	.154	.154	-	-	-	.219	.308
			-	-	-	-	2.870	2.870	-	3.912	3.912	-	-	-	5.563	7.823
19.05	26.67	-	-	-	-	-	.824	.824	-	.742	.742	-	-	-	.612	.434
			-	-	-	-	20.930	20.930	-	18.847	18.847	-	-	-	15.545	11.024
1"	1.32	1.00	-	-	-	-	.133	.133	-	.179	.179	-	-	-	.250	.358
			-	-	-	-	3.378	3.378	-	4.547	4.547	-	-	-	6.350	9.093
25.40	33.53	25.40	-	-	-	-	1.049	1.049	-	.957	.957	-	-	-	.815	.599
			-	-	-	-	26.645	26.645	-	24.308	24.308	-	-	-	20.701	15.215
1½"	1.66	1.25	-	-	-	-	.140	.140	-	.191	.191	-	-	-	.250	.382
			-	-	-	-	3.556	3.556	-	4.851	4.851	-	-	-	6.350	9.703
31.75	42.16	31.75	-	-	-	-	1.380	1.380	-	1.278	1.278	-	-	-	1.160	.896
			-	-	-	-	35.052	35.052	-	32.461	32.461	-	-	-	29.464	22.758
1¾"	1.90	1.50	-	-	-	-	.145	.145	-	.200	.200	-	-	-	.281	.400
			-	-	-	-	3.683	3.683	-	5.080	5.080	-	-	-	7.137	10.160
38.10	48.26	38.10	-	-	-	-	1.610	1.610	-	1.500	1.500	-	-	-	1.338	1.100
			-	-	-	-	40.894	40.894	-	38.100	38.100	-	-	-	33.985	27.940
2"	2.38	2.00	-	-	-	-	.154	.154	-	.218	.218	-	-	-	.344	.436
			-	-	-	-	3.912	3.912	-	5.537	5.537	-	-	-	8.738	11.074
50.80	60.45	50.80	-	-	-	-	2.067	2.067	-	1.939	1.939	-	-	-	1.687	1.503
			-	-	-	-	52.502	52.502	-	49.251	49.251	-	-	-	42.850	38.176
2½"	2.88	2.50	-	-	-	-	.203	.203	-	.276	.276	-	-	-	.375	.552
			-	-	-	-	5.156	5.156	-	7.010	7.010	-	-	-	9.525	14.021
63.50	73.15	63.50	-	-	-	-	2.469	2.469	-	2.323	2.323	-	-	-	2.125	1.771
			-	-	-	-	62.713	62.713	-	59.004	59.004	-	-	-	53.975	44.983
3"	3.50	3.00	-	-	-	-	.216	.216	-	.300	.300	-	-	-	.438	.600
			-	-	-	-	5.486	5.486	-	7.620	7.620	-	-	-	11.125	15.240
76.20	88.90	76.20	-	-	-	-	3.068	3.068	-	2.900	2.900	-	-	-	2.624	2.300
			-	-	-	-	77.927	77.927	-	73.660	73.660	-	-	-	66.650	58.420
3½"	4.00	3.50	-	-	-	-	.226	.226	-	.318	.318	-	-	-	.438	.600
			-	-	-	-	5.740	5.740	-	8.077	8.077	-	-	-	11.125	15.240
88.90	101.60	88.90	-	-	-	-	3.548	3.548	-	3.364	3.364	-	-	-	3.438	3.152
			-	-	-	-	90.119	90.119	-	85.446	85.446	-	-	-	87.325	80.061
4"	4.50	4.00	-	-	-	-	.237	.237	-	.337	.337	-	-	-	.531	.674
			-	-	-	-	6.020	6.020	-	8.560	8.560	-	-	-	13.487	17.120
101.60	114.30	101.60	-	-	-	-	4.026	4.026	-	3.826	3.826	-	-	-	3.624	3.438
			-	-	-	-	102.260	102.260	-	97.180	97.180	-	-	-	92.050	87.325
5"	5.56	5.00	-	-	-	-	.258	.258	-	.375	.375	-	-	-	.625	.750
			-	-	-	-	6.553	6.553	-	9.525	9.525	-	-	-	15.875	19.050
127.00	141.22	127.00	-	-	-	-	5.047	5.047	-	4.813	4.813	-	-	-	4.313	4.063
			-	-	-	-	128.194	128.194	-	122.250	122.250	-	-	-	109.550	103.200
			-	-	-	-	9.5	9.5	-	13.5	13.5	-	-	-	17.7	26.0

\*Not given in ASME B36.10

# Short Radius 90° ELBOWS



<b>Key</b>			<b>Nominal Wall Thickness: inches</b> <b>mm</b> <b>Inside Diameter: inches</b> <b>mm</b> <b>Approximate Weight: Pounds (see page 3 for Kg)</b>													
Nominal Pipe Size	"D" Outside Diameter at Bevel	"A" Center-to-End	<b>Schedule</b>													
inches mm	inches mm	inches mm	L.W.G.	10	20	30	40	STD WT	60	XS	80	100	120	140	160	XXS
<b>6"</b> 152.40	<b>6.63</b> 168.40	<b>6.00</b> 152.40	.219 5.563 6.187 157.150 -	- - - - -	- - - - -	- - - - -	.280 7.112 6.065 154.051 15.5	.280 7.112 6.065 154.051 15.5	- - - - -	.432 10.973 5.761 146.329 22.5	.432 10.973 5.761 146.329 22.5	- - - - -	.562 14.275 5.501 139.725 29.6	- - - - -	.719 18.263 5.187 131.750 -	.864 21.946 4.897 124.384 57.0
<b>8"</b> 203.20	<b>8.63</b> 219.20	<b>8.00</b> 203.20	.219 5.563 8.187 207.949 -	- - - - -	.250 6.350 8.125 206.375 23.5	.277 7.036 8.071 205.003 27.5	.322 8.179 7.981 202.717 31.0	.322 8.179 7.981 202.717 31.0	.406 10.312 7.813 198.450 41.0	.500 12.700 7.625 193.675 46.0	.500 12.700 7.625 193.675 46.0	.594 15.088 7.437 188.900 57.5	.719 18.263 7.187 182.550 68.7	.812 20.625 7.001 177.825 77.0	.906 23.012 6.813 173.050 127.0	.875 22.225 6.875 174.625 80.0
<b>10"</b> 254.00	<b>10.75</b> 273.05	<b>10.00</b> 254.00	.219 5.563 10.312 261.925 -	- - - - -	.250 6.350 10.250 260.350 36.4	.307 7.798 10.136 257.454 45.2	.365 9.271 10.020 254.508 55.0	.365 9.271 10.020 254.508 55.0	.500 12.700 9.750 247.650 71.0	.500 12.700 9.750 247.650 71.0	.594 15.088 9.562 242.875 86.0	.719 18.263 9.312 236.525 109.0	.844 21.438 9.062 230.175 126.0	1.000 25.400 8.750 222.250 151.0	1.125 28.575 8.500 215.900 -	1.000 25.400 8.750 222.250 -
<b>12"</b> 304.80	<b>12.75</b> 323.85	<b>12.00</b> 304.80	.250 6.350 12.250 311.150 -	- - - - -	.250 6.350 12.250 311.150 53.5	.330 8.382 12.090 307.086 71.5	.406 10.312 11.938 303.225 86.0	.375 9.525 12.000 304.800 78.0	.562 14.275 11.626 295.300 118.0	.500 12.700 11.750 298.450 100.0	.688 17.475 11.374 288.900 145.0	.844 21.438 11.062 280.975 179.0	1.000 25.400 10.750 273.050 210.0	1.125 28.575 10.500 266.700 235.0	1.312 33.325 10.126 257.200 -	1.000 25.400 10.750 273.050 -
<b>14"</b> 355.60	<b>14.00</b> 355.60	<b>14.00</b> 355.60	.250 6.350 13.500 342.900 -	.250 6.350 13.500 342.900 -	.312 7.925 13.376 339.750 84.5	.375 9.525 13.250 336.550 104.0	.438 11.125 13.124 333.350 113.0	.375 9.525 13.250 336.550 104.0	.594 15.088 12.812 325.425 159.0	.500 12.700 13.000 330.200 132.0	.750 19.050 12.500 317.500 130.0	.938 23.825 12.124 307.950 247.0	1.094 27.788 11.812 300.025 290.0	1.250 31.750 11.500 292.100 -	1.406 35.712 11.188 284.175 -	- - - - -
<b>16"</b> 406.40	<b>16.00</b> 406.40	<b>16.00</b> 406.40	.250 6.350 15.500 393.700 -	.250 6.350 15.500 393.700 -	.312 7.925 15.376 390.550 112.0	.375 9.525 15.250 387.350 118.0	.500 12.700 15.000 381.000 160.0	.375 9.525 15.250 387.350 118.0	.656 16.662 14.688 373.075 225.0	.500 12.700 15.000 381.000 160.0	.844 21.438 14.312 363.525 312.0	1.031 26.187 13.938 354.025 325.0	1.219 30.963 13.562 344.475 431.0	1.438 36.525 13.124 333.350 -	1.594 40.488 12.812 325.425 -	- - - - -
<b>18"</b> 457.20	<b>18.00</b> 457.20	<b>18.00</b> 457.20	.250 6.350 17.500 444.500 -	.250 6.350 17.500 444.500 -	.312 7.925 17.376 441.350 120.0	.438 11.125 17.124 434.950 184.0	.562 14.275 16.876 428.650 227.0	.375 9.525 17.250 438.150 148.0	.750 19.050 16.500 419.100 310.0	.500 12.700 17.000 431.800 194.0	.938 23.825 16.124 409.550 397.0	1.156 29.362 15.688 398.475 610.0	1.375 34.925 15.250 387.350 -	1.562 39.675 14.876 377.850 -	1.781 45.237 14.438 366.725 -	- - - - -
<b>20"</b> 508.00	<b>20.00</b> 508.00	<b>20.00</b> 508.00	.250 6.350 19.500 495.300 -	.250 6.350 19.500 495.300 -	.375 9.525 19.250 488.950 210.0	.500 12.700 19.000 482.600 280.0	.594 15.088 18.812 477.825 332.0	.375 9.525 19.250 488.950 210.0	.812 20.625 18.376 466.750 449.0	.500 12.700 19.000 482.600 280.0	1.031 26.187 17.938 455.625 575.0	1.281 32.537 17.438 442.925 672.0	1.500 38.100 17.000 431.800 795.0	1.750 44.450 16.500 419.100 -	1.969 50.013 16.062 407.975 -	- - - - -
<b>22"</b> 558.80	<b>22.00</b> 558.80	<b>22.00</b> 558.80	- - - - -	.250 6.350 21.500 546.100 -	.375 9.525 21.250 539.750 -	.500 12.700 21.000 533.400 -	- - - - -	.375 9.525 21.250 539.750 -	.875 22.225 20.250 514.350 -	.500 12.700 21.000 533.400 -	1.125 28.575 19.750 501.650 -	1.375 34.925 19.250 488.950 -	1.625 41.275 18.250 476.250 -	1.875 47.625 18.250 463.550 -	2.125 53.975 17.750 450.850 -	- - - - -
<b>24"</b> 609.60	<b>24.00</b> 609.60	<b>24.00</b> 609.60	.250 6.350 23.500 596.900 -	.250 6.350 23.500 596.900 -	.375 9.525 23.250 590.550 288.0	.562 14.275 22.876 581.050 453.0	.688 17.475 22.624 574.650 558.0	.375 9.525 23.250 590.550 288.0	.969 24.613 22.062 560.375 775.0	.500 12.700 23.000 584.200 370.0	1.219 30.963 21.562 547.675 961.0	1.531 38.887 20.938 531.825 1147.0	1.812 46.025 20.376 517.550 1465.0	2.062 52.375 19.876 504.850 -	2.344 59.538 19.312 490.525 -	- - - - -