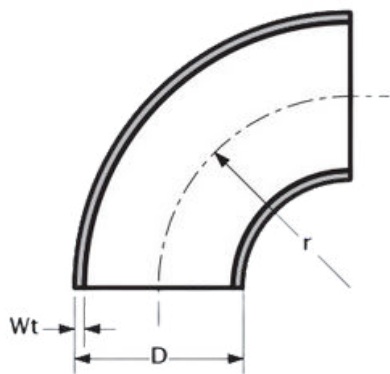
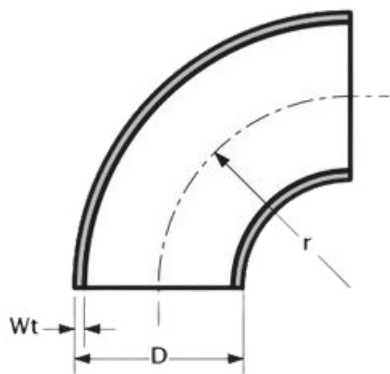


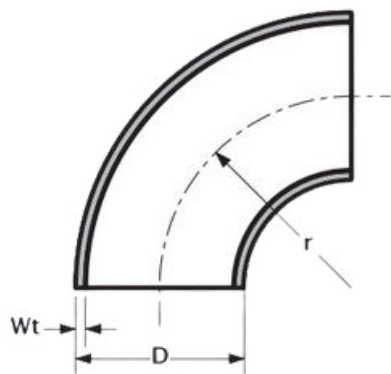
NOMINAL PIPE SIZE	OUTSIDE DIAMETER	WALL THICKNESS	RADIUS 2D		RADIUS 1.5ID		RADIUS 3D		RADIUS 5D		RADIUS 2ID + 100	
			R	KG	R	KG	R	KG	R	KG	R	KG
-	13.5	1.6	-	-	20.0	0.02	-	-	-	-	-	-
-	17.2	1.6	-	-	25.0	0.03	-	-	-	-	-	-
-	17.2	2.0	-	-	25.0	0.04	-	-	-	-	-	-
-	18.0	1.5	-	-	23.0	0.02	-	-	-	-	-	-
-	20.0	1.5	-	-	26.0	0.03	-	-	-	-	-	-
-	20.0	2	-	-	26.0	0.04	-	-	-	-	-	-
15	21.3	1.5	-	-	-	-	28.0	0.03	-	-	-	-
15	21.3	1.6	-	-	38.0	0.04	28.0	0.04	45.0	0.05	-	-
15	21.3	2.0	-	-	31.8	0.04	28.0	0.04	45.0	0.07	-	-
15	21.3	2.6 (gas)	-	-	38.0	0.05	28.0	0.06	-	-	-	-
15	21.3	3.0	-	-	-	-	28.0	0.06	-	-	-	-
15	21.3	4.0	-	-	-	-	28.0	0.08	45.0	0.13	-	-
-	23.0	1.5	-	-	30	0.04	-	-	-	-	-	-
-	24.0	2.0	-	-	-	-	-	-	-	-	120.0	0.25
-	25.0	1.5	-	-	37	0.04	-	-	-	-	-	-
20	26.9	1.5	-	-	-	-	29.0	0.04	-	-	-	-
20	26.9	1.6	-	-	-	-	29.0	0.04	57.0	0.09	-	-
20	26.9	2.0	-	-	-	-	29.0	0.06	57.0	0.11	-	-
20	26.9	2.6 (gas)	-	-	-	-	29.0	0.07	-	-	-	-
20	26.9	3.0	-	-	-	-	29.0	0.08	-	-	-	-
20	26.9	3.2	-	-	-	-	29.0	0.09	57.0	0.18	-	-
20	26.9	4.0	-	-	-	-	29.0	0.11	57.0	0.23	-	-
-	28.0	1.5	-	-	37.0	0.06	-	-	-	-	-	-
-	29.0	2.0	-	-	-	-	-	-	-	-	125.0	0.30
-	30.0	1.5	-	-	38.0	0.08	-	-	-	-	-	-
-	30.0	2.0	-	-	38.0	0.08	-	-	-	-	-	-
-	33.0	1.5	-	-	45.0	0.08	-	-	-	-	-	-
25	33.7	1.5	-	-	-	-	38.0	0.07	-	-	-	-
25	33.7	1.6	-	-	-	-	38.0	0.07	72.0	0.14	-	-
25	33.7	2.0	-	-	-	-	38.0	0.10	72.0	0.18	-	-
25	33.7	2.3	-	-	-	-	38.0	1.10	72.0	0.21	-	-
25	33.7	3.0	-	-	-	-	38.0	0.14	-	-	-	-
25	33.7	3.2	-	-	-	-	38.0	0.15	72.0	0.28	-	-
25	33.7	4.5	-	-	-	-	38.0	0.20	72.0	0.40	-	-
-	35.0	1.5	-	-	50.0	0.11	-	-	-	-	-	-
-	36.0	2.0	-	-	-	-	-	-	-	-	132.0	0.40
-	38.0	1.5	-	-	52.0	0.11	-	-	-	-	-	-
-	38.0	2.0	-	-	52.0	0.15	-	-	-	-	-	-
-	40.0	1.5	-	-	60.0	0.14	-	-	-	-	-	-
-	40.0	2.0	-	-	60.0	0.16	-	-	-	-	-	-
32	42.4	1.5	-	-	-	-	48.0	0.09	-	-	-	-
32	42.4	1.6	-	-	-	-	48.0	0.12	93.0	0.22	-	-
32	42.4	2.0	-	-	-	-	48.0	0.15	93.0	0.29	-	-
32	42.4	2.6	-	-	-	-	48.0	0.19	93.0	0.37	-	-
32	42.4	3.0	-	-	-	-	48.0	0.24	-	-	-	-
32	42.4	3.2 (gas)	-	-	-	-	48.0	0.24	-	-	-	-
32	42.4	3.6	-	-	-	-	48.0	0.26	93.0	0.51	-	-
32	42.4	5.0	-	-	-	-	48.0	0.31	93.0	0.72	-	-
-	43.0	1.5	-	-	60.0	0.15	-	-	-	-	-	-



NOMINAL PIPE SIZE	OUTSIDE DIAMETER	WALL THICKNESS	RADIUS 2D		RADIUS 1.5ID		RADIUS 3D		RADIUS 5D		RADIUS 2ID + 100	
			R	KG	R	KG	R	KG	R	KG	R	KG
-	44.0	2.0	-	-	-	-	-	-	-	-	140.0	0.50
-	44.5	2.0	-	-	51.0	0.19	-	-	-	-	-	-
40	48.3	1.5	-	-	-	-	57.0	0.15	-	-	-	-
40	48.3	1.6	-	-	-	-	57.0	0.17	108.0	0.31	-	-
40	48.3	2.0	-	-	-	-	57.0	0.21	108.0	0.39	-	-
40	48.3	2.6	-	-	-	-	57.0	0.27	108.0	0.51	-	-
40	48.3	3.0	-	-	-	-	57.0	0.31	108.0	0.52	-	-
40	48.3	3.2 (gas)	-	-	-	-	57.0	0.32	108.0	0.54	-	-
40	48.3	3.6 (gas)	-	-	-	-	57.0	0.36	108.0	0.62	-	-
40	48.3	5.0	-	-	-	-	57.0	0.50	108.0	1.00	-	-
-	51.0	1.5	-	-	75.0	0.22	-	-	-	-	-	-
-	51.0	2.0	-	-	75.0	0.27	-	-	-	-	-	-
-	53.0	1.5	-	-	75.0	0.16	-	-	-	-	-	-
-	54.0	2.0	-	-	75.0	0.30	-	-	-	-	150.0	0.60
-	56.0	3.0	-	-	-	-	-	-	-	-	150.0	0.90
50	60.3	1.5	-	-	-	-	76.0	0.26	-	-	-	-
50	60.3	1.6	51.0	0.19	-	-	76.0	0.28	135.0	0.48	-	-
50	60.3	2.0	51.0	0.23	-	-	76.0	0.35	135.0	0.61	-	-
50	60.3	2.3	51.0	0.27	-	-	76.0	0.40	135.0	0.71	-	-
50	60.3	3.0	-	-	-	-	76.0	0.52	-	-	-	-
50	60.3	3.6 (gas)	-	-	-	-	76.0	0.61	-	-	-	-
50	60.3	4.0	51.0	0.46	-	-	76.0	0.70	135.0	1.24	-	-
50	60.3	5.6	51.0	0.65	-	-	76.0	0.97	135.0	1.74	-	-
-	63.5	1.5	-	-	90.0	0.35	-	-	-	-	-	-
-	64.0	2.0	-	-	90.0	0.43	-	-	-	-	-	-
-	69.0	2.0	-	-	95.0	0.49	-	-	-	-	165.0	0.90
-	70.0	2.0	-	-	95.0	0.50	-	-	-	-	-	-
-	73.0	1.5	-	-	95.0	0.40	-	-	-	-	-	-
65	76.1	1.5	-	-	-	-	95.0	0.40	-	-	-	-
65	76.1	2.0	-	-	-	-	95.0	0.56	175.0	1.00	-	-
65	76.1	2.3	63.0	0.39	-	-	95.0	0.60	175.0	1.17	-	-
65	76.1	2.6	63.0	0.44	-	-	95.0	0.75	175.0	1.20	-	-
65	76.1	3.0	-	-	-	-	95.0	0.83	-	-	-	-
65	76.1	3.6 (gas)	-	-	-	-	95.0	0.99	-	-	-	-
65	76.1	5.0	63.0	0.87	-	-	95.0	1.31	175.0	2.31	-	-
65	76.1	7.1	63.0	1.00	-	-	95.0	1.85	175.0	3.28	-	-
-	84.0	2.0	-	-	120.0	0.77	-	-	-	-	180.0	1.20
-	86.0	3.0	-	-	-	-	-	-	-	-	180.0	1.90
80	88.9	1.5	-	-	-	-	114.0	0.58	-	-	-	-
80	88.9	2.0	76.0	0.51	-	-	114.0	0.79	205.0	1.20	-	-
80	88.9	2.3	76.0	0.58	-	-	114.0	0.88	205.0	1.46	-	-
80	88.9	3.0	-	-	-	-	114.0	1.17	-	-	-	-
80	88.9	4.0 (gas)	-	-	-	-	114.0	1.53	-	-	-	-
80	88.9	5.6	76.0	1.41	-	-	114.0	2.14	205.0	3.55	-	-
80	88.9	8.0	76.0	2.01	-	-	114.0	3.10	205.0	5.07	-	-
90	101.6	2.0	-	-	-	-	133.0	1.05	-	-	-	-
90	101.6	3.0	-	-	-	-	133.0	1.55	-	-	-	-



NOMINAL PIPE SIZE	OUTSIDE DIAMETER	WALL THICKNESS	RADIUS 2D		RADIUS 1.5ID		RADIUS 3D		RADIUS 5D		RADIUS 2ID + 100	
			R	KG	R	KG	R	KG	R	KG	R	KG
-	104.0	2.0	-	-	150.0	1.19	-	-	-	-	200.0	1.61
-	106.0	3.0	-	-	-	-	150	1.80	-	-	200.0	2.37
-	108.0	4.0	-	-	142.0	2.35	-	-	-	-	200.0	3.16
100	114.3	2.0	102.0	0.87	-	-	152.0	1.35	270.0	2.30	-	-
100	114.3	2.6	102.0	1.13	-	-	152.0	1.75	270.0	2.90	-	-
100	114.3	3.0	-	-	-	-	152.0	2.01	-	-	-	-
100	114.3	4.0 (gas)	-	-	-	-	152.0	2.58	-	-	-	-
100	114.3	6.3	102.0	2.74	-	-	152.0	4.07	270.0	7.03	-	-
100	114.3	8.8	102.0	3.83	-	-	152.0	5.68	270.0	9.82	-	-
-	129.0	2.0	-	-	188.0	1.88	-	-	-	-	225.0	2.20
125	139.7	2.0	127.0	1.38	-	-	190.0	2.07	330.0	3.41	-	-
125	139.7	2.6	127.0	1.79	-	-	190.0	2.68	330.0	4.43	-	-
125	139.7	3.0	-	-	-	-	190.0	3.08	-	-	-	-
125	139.7	3.2	127.0	2.20	-	-	190.0	3.15	330.0	5.45	-	-
125	139.7	4.0	127.0	2.75	-	-	190.0	4.08	330.0	6.81	-	-
125	139.7	6.3	127.0	4.34	-	-	190.0	6.32	330.0	10.73	-	-
125	139.7	10.0	127.0	6.58	-	-	190.0	10.03	330.0	17.03	-	-
-	154.0	2.0	-	-	225.0	2.69	-	-	-	-	250.0	3.10
-	155.0	2.5	-	-	-	-	-	-	-	-	250.0	3.75
-	156.0	3.0	-	-	225.0	4.60	-	-	-	-	250.0	4.50
-	158.0	4.0	-	-	-	-	-	-	-	-	250.0	6.00
-	160.0	5.0	-	-	-	-	-	-	-	-	250.0	7.50
150	168.3	2.0	152.0	1.94	-	-	229.0	3.00	390.0	4.86	-	-
150	168.3	2.6	152.0	2.52	-	-	229.0	3.88	390.0	6.33	-	-
150	168.3	3.0	-	-	-	-	229.0	4.46	-	-	-	-
150	168.3	3.2	152.0	3.10	-	-	229.0	4.62	390.0	7.79	-	-
150	168.3	4.5	152.0	4.35	-	-	229.0	6.50	390.0	10.95	-	-
150	168.3	7.1	152.0	6.88	-	-	229.0	10.10	390.0	17.28	-	-
150	168.3	11.0	152.0	10.66	-	-	229.0	15.30	390.0	26.77	-	-
-	204.0	2.0	-	-	300.0	4.80	-	-	-	-	300.0	4.73
-	206.0	3.0	-	-	300.0	7.30	-	-	-	-	300.0	6.86
-	208.0	4.0	-	-	-	-	-	-	-	-	300.0	9.15
-	210.0	5.0	-	-	-	-	-	-	-	-	300.0	11.43
200	219.1	2.0	203.0	3.37	-	-	305.0	5.21	510.0	8.55	-	-
200	219.1	2.6	203.0	4.38	-	-	305.0	7.52	510.0	11.11	-	-
200	219.1	3.0	-	-	-	-	305.0	7.78	-	-	-	-
200	219.1	3.6	203.0	6.07	-	-	305.0	8.94	510.0	15.38	-	-
200	219.1	6.3	203.0	10.63	-	-	305.0	15.65	510.0	26.92	-	-
200	219.1	8.0	203.0	13.50	-	-	305.0	19.87	510.0	34.18	-	-
200	219.1	12.5	203.0	21.09	-	-	305.0	31.90	510.0	54.38	-	-
-	254.0	2.0	-	-	375.0	7.42	-	-	-	-	350.0	7.00
-	255.0	2.5	-	-	-	-	-	-	-	-	350.0	9.28
-	256.0	3.0	-	-	375.0	11.19	-	-	-	-	350.0	10.50
-	258.0	4.0	-	-	-	-	-	-	-	-	350.0	14.85
-	260.0	5.0	-	-	-	-	-	-	-	-	350.0	18.56
250	273.0	2.0	254.0	5.37	-	-	381.0	8.12	650.0	13.66	-	-
250	273.0	3.0	-	-	-	-	381.0	12.14	-	-	-	-
250	273.0	3.6	254.0	9.67	-	-	381.0	14.42	650.0	24.60	-	-
250	273.0	4.0	254.0	10.74	-	-	381.0	16.12	650.0	27.35	-	-
250	273.0	6.3	254.0	16.60	-	-	381.0	25.26	650.0	43.09	-	-



NOMINAL PIPE SIZE	OUTSIDE DIAMETER	WALL THICKNESS	RADIUS 2D		RADIUS 1.5ID		RADIUS 3D		RADIUS 5D		RADIUS 2ID + 100	
			R	KG	R	KG	R	KG	R	KG	R	KG
250	273.0	10.0	254.0	26.34	-	-	381.0	36.00	650.0	61.42	-	-
-	306.0	3.0	-	-	-	-	450.0	16.08	-	-	400.0	14.00
300	323.9	2.0	-	-	-	-	457.0	11.57	775	18.33	-	-
300	323.9	2.6	305.0	9.95	-	-	457.0	14.85	775	20.11	-	-
300	323.9	3.0	-	-	-	-	457.0	17.3	775	23.19	-	-
300	323.9	4.0	305.0	15.30	-	-	457.0	23.0	775	29.40	-	-
300	323.9	4.5	305.0	17.21	-	-	457.0	25.72	775	32.52	-	-
300	323.9	7.1	305.0	26.74	-	-	457.0	40.58	775	52.21	-	-
300	323.9	10.0	305.0	37.66	-	-	457.0	57.16	619.0	73.55	-	-
350	355.6	2.6	356.0	12.75	-	-	533.0	19.00	850.0	28.79	-	-
350	355.6	3.0	-	-	-	-	533.0	22.40	-	-	-	-
350	355.6	4.0	356.0	19.62	-	-	533.0	29.87	850.0	45.25	-	-
350	355.6	5.0	356.0	24.52	-	-	533.0	37.43	850.0	56.71	-	-
350	355.6	8.0	356.0	38.71	-	-	533.0	59.73	850.0	90.49	-	-
350	355.6	11.0	356.0	53.22	-	-	533.0	82.13	850.0	124.43	-	-
-	356.0	3.0	-	-	-	-	-	-	-	-	450.0	18.82
400	406.4	2.6	406.0	16.68	-	-	610.0	24.75	970.0	37.39	-	-
400	406.4	3.0	-	-	-	-	610.0	29.04	-	-	500.0	23.78
400	406.4	4.0	406.0	25.67	-	-	610.0	38.6	970.0	57.57	-	-
400	406.4	5.0	406.0	32.08	-	-	610.0	47.64	970.0	71.97	-	-
400	406.4	8.8	406.0	55.80	-	-	610.0	83.85	970.0	126.67	-	-
400	406.4	12.5	406.0	79.26	-	-	610.0	119.11	970.0	179.93	-	-
-	410.0	5.0	-	-	-	-	-	-	-	-	500.0	40.00
-	412.0	6.0	-	-	-	-	-	-	-	-	500.0	48.00
-	456.0	3.0	-	-	-	-	-	-	-	-	550.0	30.00
450	457.2	3.0	-	-	-	-	686.0	36.76	-	-	-	-
450	457.2	3.2	457.0	26.02	-	-	686.0	38.00	1122.0	59.04	-	-
450	457.2	4.0	457.0	32.53	-	-	686.0	48.00	1122.0	74.58	-	-
450	457.2	5.0	457.0	40.66	-	-	686.0	60.00	1122.0	93.22	-	-
450	457.2	10.0	457.0	81.32	-	-	686.0	119.00	1122.0	184.90	-	-
-	458.0	4.0	-	-	-	-	-	-	-	-	550.0	40.00
-	460.0	5.0	-	-	-	-	-	-	-	-	550.0	49.00
-	462.0	6.0	-	-	-	-	-	-	-	-	550.0	59.00
500	508.0	3.0	-	-	-	-	762.0	45.40	-	-	-	-
500	508.0	3.2	508.0	32.11	-	-	762.0	60.80	1245.0	94.37	-	-
500	508.0	4.0	508.0	42.16	-	-	762.0	76.13	-	-	-	-
500	508.0	5.0	508.0	50.17	-	-	762.0	96.25	1245.0	149.37	-	-
500	508.0	5.6	508.0	60.21	-	-	762.0	107.80	1245.0	167.32	-	-
500	508.0	11.0	508.0	109.50	-	-	762.0	211.75	1245.0	328.67	-	-
-	606.0	3.0	-	-	-	-	-	-	-	-	700.0	49.00
-	608.0	4.0	-	-	-	-	-	-	-	-	700.0	66.00
-	610.0	5.0	-	-	-	-	-	-	-	-	700.0	83.00
600	610.0	3.0	-	-	-	-	914.0	66.00	-	-	-	-
600	610.0	3.2	610.0	46.26	-	-	914.0	68.00	1524.0	107.71	-	-
600	610.0	4.0	-	-	-	-	914.0	87.01	-	-	-	-
600	610.0	5.6	610.0	80.96	-	-	914.0	120.00	1524.0	190.09	-	-
600	610.0	6.3	610.0	91.08	-	-	914.0	135.00	1524.0	213.85	-	-
600	610.0	12.5	610.0	178.81	-	-	914.0	264.00	1524.0	418.18	-	-