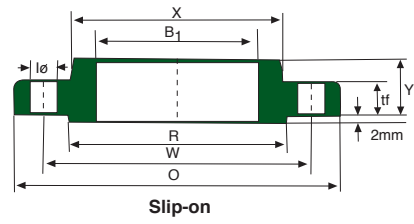
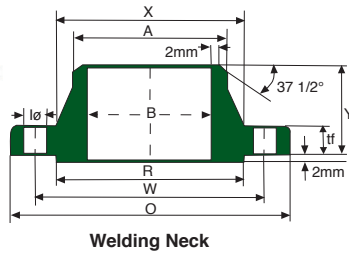


Flanges CL150

ASME B16.5



Pipe		Flanges										
Nom. Size NPS	O D mm	O mm	B mm	B ₁ mm	B ₂ mm	Q mm	D mm	r mm	tf mm	Y mm	Y ₁ mm	Y ₂ mm
									See note 2			
1/2"	21.3	90		22.2	22.9		10	3	9.6	46	14	16
3/4"	26.7	100		27.7	28.2		11	3	11.2	51	14	16
1"	33.4	110		34.5	34.9		13	3	12.7	54	16	17
1 1/4"	42.2	115		43.2	43.7		14	5	14.3	56	19	21
1 1/2"	48.3	125		49.5	50.0		16	6	15.9	60	21	22
2"	60.3	150		61.9	62.5		17	8	17.5	62	24	25
2 1/2"	73.0	180		74.6	75.4		19	8	20.7	68	27	29
3"	88.9	190		90.7	91.4		21	10	22.3	68	29	30
3 1/2"	101.6	215		103.4	104.1			10	22.3	70	30	32
4"	114.3	230		116.1	116.8			11	22.3	75	32	33
5"	141.3	255		143.8	144.4			11	22.3	87	35	36
6"	168.3	280		170.7	171.4			13	23.9	87	38	40
8"	219.1	345		221.5	222.3			13	27	100	43	44
10"	273	405		276.2	277.4			13	28.6	100	48	49
12"	323.8	485		327.0	328.2			13	30.2	113	54	56
14"	355.6	535		359.2	360.2			13	33.4	125	56	79
16"	406.4	595		410.5	411.2			13	35.0	125	62	87
18"	457	635		461.8	462.3			13	38.1	138	67	97
20"	508.0	700		513.1	514.4			13	41.3	143	71	103
24"	610.0	815		616	616.0			13	46.1	151	81	111

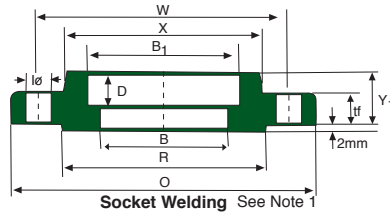
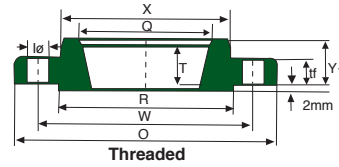
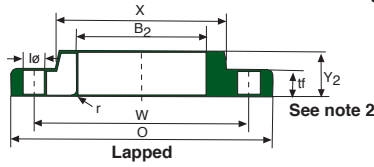
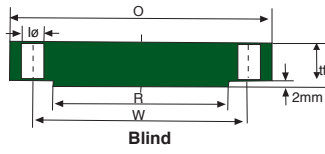
Refer to ASME B36 - 10 / B36 - 19 or as specified by purchaser

No counter bore required on threaded flanges

Note 1: Socket weld flanges up to 3" in this pressure rating.
 Note 2: For Lapped flanges, add 1.6mm to tf dimension.
 Note 3: Threaded Flanges shall have a taper pipe thread conforming to ASME B1.20.1

Flanges CL150 (cont.)

ASME B16.5



• See Note 3

T mm	Hub		Raised Face R mm	Drilling Template			Approx. Weight					
	A mm	X mm		Number	lø mm	W mm	W/N kg	S/O kg	Lapped kg	Blind kg	S/W kg	Thrd kg
16	21.3	30	34.9	4	15.7	60.3	0.48	0.39	0.38	0.42	0.42	0.39
16	26.7	38	42.9	4	15.7	69.9	0.17	0.56	0.55	0.61	0.59	0.56
17	33.4	49	50.8	4	15.7	79.4	1.01	0.78	0.76	0.86	0.81	0.78
21	42.2	59	63.5	4	15.7	88.9	1.33	1.03	1.01	1.17	1.07	1.03
22	48.3	65	73.0	4	15.7	98.4	1.72	1.32	1.30	1.53	1.36	1.32
25	60.3	78	92.1	4	19.1	120.7	2.58	2.06	2.03	2.42	2.10	2.06
29	73.0	90	104.8	4	19.1	139.7	4.11	3.28	3.25	3.94	3.90	3.28
30	88.9	108	127.0	4	19.1	152.4	4.92	3.85	3.81	4.93	3.90	3.28
32	101.6	122	139.7	8	19.1	177.8	6.08	4.81	4.76	6.17		4.81
33	114.3	135	157.2	8	19.1	190.5	6.84	5.30	5.28	7.00		5.30
36	141.2	164	185.7	8	22.4	215.9	8.56	6.07	6.02	8.63		6.07
40	168.3	192	215.9	8	22.4	241.3	10.6	7.45	7.40	11.3		7.45
44	219.1	246	269.9	8	22.4	298.5	17.8	12.1	12.1	19.6		12.1
49	273.0	305	323.8	12	25.4	362.0	24.0	16.5	16.4	28.8		16.5
56	323.8	365	381.0	12	25.4	431.8	36.5	26.2	26.1	43.2		26.2
57	355.5	400	412.8	12	28.4	476.3	48.4	34.5	34.5	58.1		34.6
64	406.4	457	469.9	16	28.4	539.8	60.6	44.8	44.6	76.0		44.8
68	457.0	505	533.4	16	31.8	577.9	68.3	48.9	48.7	93.7		48.9
73	508.0	559	584.2	20	31.8	635.0	84.5	61.9	61.6	122.0		61.9
83	610.0	663	692.2	20	35.1	749.3	115	85.9	86.6	185.0		86.9

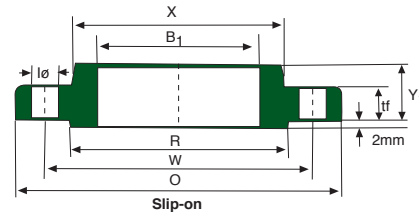
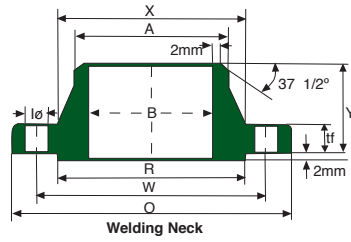
Note 1: Socket weld flanges up to 3" in this pressure rating.

Note 2: For Lapped flanges, add 1.6mm to tf dimension.

Note 3: Threaded Flanges shall have a taper pipe thread conforming to ASME B1.20.1

Flanges CL300

ASME B16.5

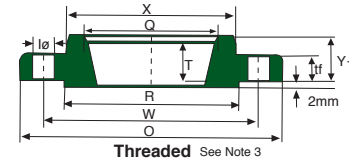
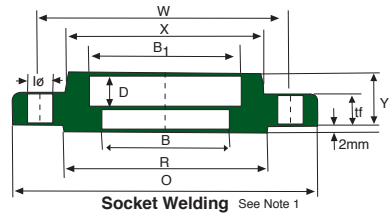
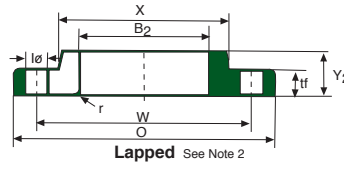
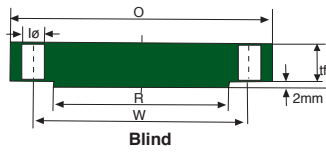


Pipe		Flanges										
Nom. Size	O D mm	O mm	B mm	B ₁ mm	B ₂ mm	Q mm	D mm	r mm	tf mm	Y mm	Y ₁ mm	Y ₂ mm
1/2"	21.3	95	Refer to ASME B36 - 10 / B36 - 19 or as specified by purchaser	22.2	22.9	23.6	10	3	12.7	51	21	22
3/4"	26.7	115		27.7	28.2	29.0	11	3	14.3	56	24	25
1"	33.4	125		34.5	34.9	35.8	13	3	15.9	60	25	27
1 1/4"	42.2	135		43.2	43.7	44.4	14	5	17.5	64	25	27
1 1/2"	48.3	155		49.5	50.0	50.3	16	6	19.1	67	29	30
2"	60.3	165		61.9	62.5	63.5	17	8	20.7	68	32	33
2 1/2"	73.0	190		74.6	75.4	76.2	19	8	23.9	75	37	38
3"	88.9	210		90.7	91.4	92.2	21	10	27.0	78	41	43
3 1/2"	101.8	230		103.4	104.1	104.9		10	28.6	79	43	44
4"	114.3	255		116.1	116.8	117.6		11	30.2	84	46	48
5"	141.3	280		143.8	144.4	128.2		11	33.4	97	49	51
6"	168.3	320		170.7	171.4	171.4		13	35.0	97	51	52
8"	219.1	380		221.5	222.2	222.2		13	39.7	110	60	62
10"	273	445		276.2	277.4	276.2		13	46.1	116	65	95
12"	323.8	520		327.0	328.2	328.6		13	49.3	129	71	102
14"	355.6	585		359.2	360.2	360.4		13	53.4	141	75	111
16"	406.4	650		410.5	411.2	411.2		13	55.6	144	81	121
18"	457.2	710		461.8	462.3	462		13	58.8	157	87	130
20"	508.0	775		513.1	514.4	512.8		13	62.0	160	94	140
24"	610	915		616.0	616.0	614.4		13	68.3	167	105	152

Note 1: Socket weld flanges up to 3" in this pressure rating.
 Note 2: For Lapped flanges, add 1.6mm to tf dimension.
 Note 3: Threaded flanges shall have a tapered thread to ASME B1.20.1.

Flanges CL300 (cont.)

ASME B16.5

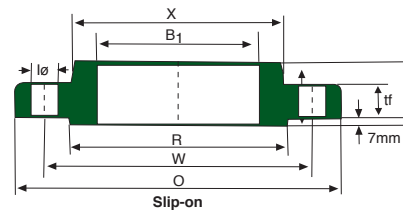
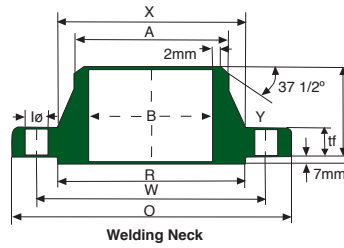


T mm	Hub		Raised Face R mm	Drilling Template			Approx. Weight					
	A mm	X mm		Number	lØ mm	W mm	W/N kg	S/O kg	Lapped kg	Blind kg	S/W kg	Thrd kg
16	21.3	38	34.9	4	16.7	66.7	0.75	0.64	0.62	0.64	0.66	0.64
16	26.7	48	42.9	4	19.0	82.6	1.26	1.12	1.10	1.11	1.15	1.12
18	33.4	54	50.8	4	19.0	88.8	1.52	1.36	1.33	1.39	1.40	1.36
21	42.2	64	63.5	4	19.0	96.4	2.03	1.68	1.65	1.79	1.75	1.58
23	48.3	70	73.1	4	22.3	114.3	2.89	2.49	2.44	2.66	2.55	2.49
29	60.3	84	91.9	8	19.0	127.0	3.40	2.87	2.83	3.18	2.93	2.87
32	73.0	100	104.6	8	22.3	149.2	5.17	4.32	4.25	4.85	4.40	4.32
32	88.9	117	127.0	8	22.3	168.3	6.93	5.85	5.78	6.81	3.92	5.86
37	101.6	133	139.7	8	22.3	184.2	8.87	7.34	7.27	8.71		7.34
37	114.3	146	157.2	8	22.3	200.0	11.2	9.61	9.55	11.5		9.61
43	141.3	178	185.6	8	22.3	235.0	15.1	12.3	12.2	15.0		12.30
47	168.3	206	215.9	12	22.4	269.9	19.1	15.6	15.5	20.9		15.80
51	219.1	260	269.9	12	22.3	330.2	29.9	24.2	24.1	34.3		24.20
56	273.0	321	323.8	16	25.4	387.4	42.7	34.1	34.4	53.3		34.10
61	323.6	375	331.0	16	28.4	450.8	61.8	49.8	50.4	78.8		49.80
64	355.6	425	412.8	20	31.7	541.4	85.0	69.9	70.9	105.0		69.9
69	406.4	483	469.9	20	31.7	571.5	106	88.1	89.5	137.0		88.10
70	457.0	533	533.4	24	35.0	628.6	131	109.0	111.0	175.0		109.0
74	508.0	587	584.2	24	35.0	685.8	158	134.0	137.0	221.0		134.0
83	610.0	702	692.2	24	41.1	812.8	230	201.0	204.0	339.0		201.0

Note 1: Socket weld flanges up to 3" in this pressure rating.
 Note 2: For Lapped flanges, add 1.6mm to tf dimension.
 Note 3: Threaded flanges shall have a tapered thread to ASME B1.20.1.

Flanges CL600

ASME B16.5



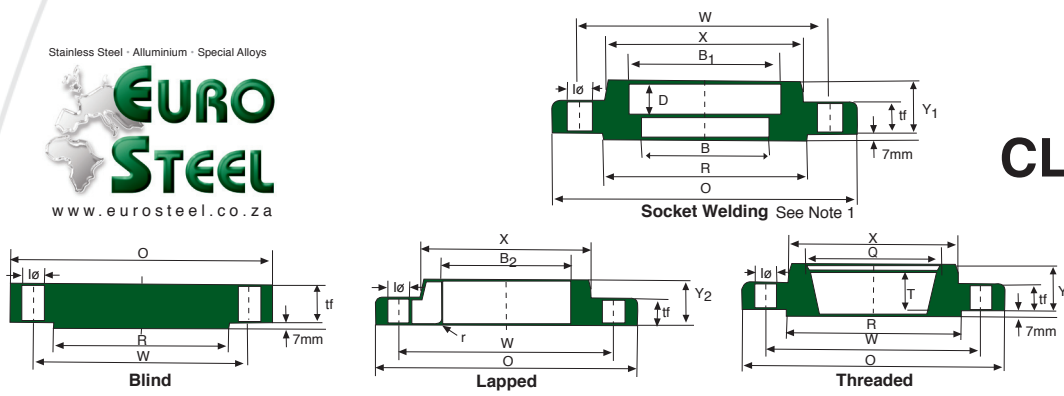
Pipe		Flanges										
Nom. Size NPS	O D mm	O mm	B mm	B ₁ mm	B ₂ mm	Q mm	D mm	r mm	tf mm	Y mm	Y ₁ mm	Y ₂ mm
1/2"	21.3	95	Table specified by purchaser	22.2	22.9	23.6	10	3	14.3	52	22	22
3/4"	26.7	115		27.7	28.2	29.0	11	3	15.9	57	25	25
1"	33.4	125		34.5	34.9	35.8	13	3	17.5	62	27	27
1 1/4"	42.2	135		43.2	43.7	44.4	14	5	20.7	67	29	29
1 1/2"	48.3	155		49.5	50.0	50.6	16	6	22.3	70	32	32
2"	60.3	165		61.9	62.5	63.5	17	8	25.4	73	37	37
2 1/2"	73.0	190		74.6	75.4	76.2	19	8	28.6	79	41	41
3"	88.9	210		90.7	91.4	92.2	21	10	31.8	83	46	46
3 1/2"	101.6	230		103.4	104.1	104.9		10	35.0	86	49	48
4"	114.3	275		116.1	116.8	117.6		11	33.1	102	54	54
5"	141.3	330		143.8	144.4	144.4		11	44.5	114	60	60
6"	168.3	355		170.7	171.4	171.4		13	47.7	117	67	67
8"	219.1	420		221.5	222.2	222.2		13	55.6	133	76	76
10"	273	510		278.2	277.4	276.2		13	63.5	152	85	111
12"	323.8	560		327.0	328.2	328.6		13	66.7	156	92	117
14"	355.6	605		359.2	360.2	360.4		13	69.9	165	94	127
16"	406.4	685		410.5	411.2	411.2		13	76.2	178	106	140
18"	457.2	745		461.8	462.3	462.0		13	82.5	184	117	152
20"	508.0	815		513.1	514.4	512.8		13	88.9	190	127	165
24"	610	940		618.0	616.0	614.4		13	101.6	203	140	184

Note 1: Socket weld flanges up to 3" in this pressure rating.

Note 2: Threaded Flanges shall have a taper pipe thread conforming to ASME B1.20.1

Flanges CL600 (cont.)

ASME B16.5



• See Note 2

T mm	Hub		Raised Face R mm	Drilling Template			Approx. Weight					
	A mm	X mm		Number	lø mm	W mm	W/N kg	S/O kg	Lapped kg	Blind kg	S/W kg	Thrd kg
16	21.3	38	35.1	4	15.7	66.7	0.87	0.74	0.72	0.76	0.76	0.74
16	26.7	48	42.9	4	19.1	82.6	1.45	1.27	1.25	1.28	1.29	1.27
18	33.4	54	50.8	4	19.1	88.9	1.76	1.52	1.50	1.60	1.55	1.52
21	42.2	64	63.5	4	19.1	98.4	2.49	2.03	2.00	2.23	2.06	2.03
23	48.3	70	73.2	4	22.4	114.3	3.49	2.95	2.92	3.25	3.00	2.96
29	60.3	84	91.9	8	19.1	127.0	4.36	3.62	3.55	4.15	3.67	3.62
32	73.0	100	104.6	8	22.4	149.2	6.43	5.28	5.23	6.13	5.35	5.28
35	88.9	117	127.0	8	22.4	168.3	8.53	7.00	6.95	8.44	7.06	7.00
40	101.6	133	139.7	8	25.4	184.2	10.7	8.84	8.78	11.0		8.84
42	114.3	152	157.2	8	25.4	215.9	17.4	14.5	14.4	17.3		14.5
48	141.3	169	185.7	8	28.4	266.7	29.2	24.4	24.3	29.4		24.4
51	168.3	222	215.9	12	28.4	292.1	34.9	28.7	28.5	36.1		28.7
58	219.1	273	269.9	12	31.8	349.2	53.9	43.4	43.1	58.9		43.4
66	273.0	343	323.8	16	35.1	431.8	86.5	70.3	70.5	97.5		70.3
70	323.6	400	381.0	20	35.1	489.0	103	84.2	86.1	124		84.2
74	355.6	432	412.8	20	38.1	527.0	122	98.7	100	151		98.7
78	406.4	495	469.9	20	41.1	693.2	170	142	145	214		142
80	457.0	546	533.4	20	44.5	654.0	204	173	177	272		173
83	508.0	610	584.2	24	44.5	723.9	254	220	225	349		220
93	610.0	718	692.2	24	50.8	838.2	358	312	318	533		312

Note 1: Socket weld flanges up to 3" in this pressure rating.

Note 2: Threaded Flanges shall have a taper pipe thread conforming to ASME B1.20.1