

FLANGE DETAILS



TABLE NO. 1

IS: 1538, PT-IV & VI (PN-1.0 & PN-1.6)					
SIZE	FLANGE DIA	FLANGE THICKNESS	PCD	NO. OF HOLE	HOLE DIA
50	165	16	125	4	19
65	185	16	145	4	19
80	200	21	160	4	19
100	220	22	180	8	19
125	250	22.5	210	8	19
150	285	23	240	8	23
200	340	24.5	295	8	23
250	395	26	350	12	23
300	445	27.5	400	12	23
350	505	29	460	16	23
400	565	30	515	16	28
450	615	31.5	565	20	28
500	670	33	620	20	28
600	780	36	725	20	31
700	895	38.5	840	24	31
750	960	40	900	24	31
800	1015	41.5	950	24	34
900	1115	44	1050	28	34
1000	1230	47	1160	28	37
1100	1340	50	1270	32	37
1200	1455	53	1380	32	40
1500	1800	61	1710	40	43

TABLE NO. 2

SIZE	BS 4504, PART-1, TABLE 10/11 (10 BAR)					BS 4504, PART-1, TABLE 16/11 (16 BAR)				
	FLANGE DIA	FLANGE THICK	PCD	NO. OF HOLE	HOLE DIA	FLANGE DIA	FLANGE THICK	PCD	NO. OF HOLE	HOLE DIA
10	90	14	60	4	14	90	14	60	4	14
15	95	14	65	4	14	95	14	65	4	14
20	105	16	75	4	14	105	16	75	4	14
25	115	16	85	4	14	115	16	85	4	14
32	140	18	100	4	18	140	18	100	4	18
40	150	18	110	4	18	150	18	110	4	18
50	165	20	125	4	18	165	20	125	4	18
65	185	20	145	4	18	185	20	145	4	18
80	200	22	160	8	18	200	22	160	8	18
100	220	24	180	8	18	220	24	180	8	18
125	250	26	210	8	18	250	26	210	8	18
150	285	26	240	8	22	285	26	240	8	22
175	315	28	270	8	22	315	28	270	8	22
200	340	26	295	8	22	340	30	295	12	22
250	395	28	350	12	22	405	32	355	12	26
300	445	28	400	12	22	460	32	410	12	26
350	505	30	460	16	22	520	36	470	16	26
400	565	32	515	16	26	580	38	525	16	30
450	615	32	565	20	26	640	40	585	20	30
500	670	34	620	20	26	715	42	650	20	33
600	780	36	725	20	30	840	48	770	20	36
700	895	40	840	24	30	910	54	840	24	36
800	1015	44	950	24	33	1025	58	950	24	39
900	1115	46	1050	28	33	1125	62	1050	28	39
1000	1230	50	1160	28	36	1255	66	1170	28	42
1200	1455	56	1380	32	39	-	-	-	-	-
1400	1675	62	1590	36	42	-	-	-	-	-
1600	1915	68	1820	40	48	-	-	-	-	-
1800	2115	70	2020	44	48	-	-	-	-	-
2000	2325	74	2230	48	48	-	-	-	-	-
2200	2550	80	2440	52	56	-	-	-	-	-
2400	2760	82	2650	56	56	-	-	-	-	-
2600	2960	88	2850	60	56	-	-	-	-	-
2800	3180	94	3070	64	56	-	-	-	-	-
3000	3405	100	3290	68	62	-	-	-	-	-

FLANGE DETAILS



TABLE NO. 3

SIZE	ANSI B16.5 (CLASS-150#)							ANSI B16.5 (CLASS-300#)						
	FLANGE DIA	FLANGE THICK	RF DIA	RF THICK	PCD	NO. OF HOLE	HOLE DIA	FLANGE DIA	FLANGE THICK	RF DIA	RF THICK	PCD	NO. OF HOLE	HOLE DIA
15	90	11.6	35	2	60.3	4	15.8	95	14.7	35	2	66.7	4	15.8
20	100	13.2	43	2	69.9	4	15.8	115	16.3	43	2	82.6	4	19
25	110	14.7	51	2	79.4	4	15.8	125	17.9	51	2	88.9	4	19
32	115	16.3	64	2	88.9	4	15.8	135	19.5	64	2	98.4	4	19
40	127	17.9	73	2	98.4	4	15.8	155	21.1	73	2	114.3	4	22.2
50	150	19.5	92	2	120.7	4	19	165	22.7	92	2	127	8	19
65	180	21.7	105	2	139.7	4	19	190	25.9	105	2	149.2	8	22.2
80	190	24.3	127	2	152.4	4	19	210	29	127	2	168.3	8	22.2
100	230	24.3	157	2	190.5	8	19	255	32.2	157	2	200	8	22.2
125	255	24.3	186	2	215.9	8	22.2	280	35.4	186	2	235	8	22.2
150	280	25.9	216	2	241.3	8	22.2	320	37	216	2	269.9	12	22.2
200	345	29	270	2	298.5	8	22.2	380	41.7	270	2	330.2	12	25.4
250	405	30.6	324	2	362	12	25.4	445	48.1	324	2	387.4	16	28.6
300	485	32.2	381	2	431.8	12	25.4	520	51.3	381	2	450.8	16	31.8
350	535	35.4	413	2	476.3	12	28.6	585	54.4	413	2	514.4	20	31.8
400	595	37	470	2	539.8	16	28.6	650	57.6	470	2	571.5	20	35
450	635	40.1	533	2	577.9	16	31.8	710	60.8	533	2	628.6	24	35
500	700	43.3	584	2	635	20	31.8	775	64	584	2	685.8	24	35
600	815	48.1	692	2	749.3	20	35	915	70.3	692	2	812.8	24	41.3

TABLE NO. 4

SIZE	ISO 7005, PART-1 (PN-1.0)					ISO 7005, PART-1 (PN-1.6)				
	FLANGE DIA	FLANGE THK	PCD	NO. OF HOLE	HOLE DIA	FLANGE DIA	FLANGE THK	PCD	NO. OF HOLE	HOLE DIA
10	90	14	60	4	14	90	14	60	4	14
15	95	14	65	4	14	95	14	65	4	14
20	105	16	75	4	14	105	16	75	4	14
25	115	16	85	4	14	115	16	85	4	14
32	140	18	100	4	18	140	18	100	4	18
40	150	18	110	4	18	150	18	110	4	18
50	165	20	125	4	18	165	20	125	4	18
65	185	20	145	8	18	185	20	145	8	18
80	200	20	160	8	18	200	20	160	8	18
100	220	22	180	8	18	220	22	180	8	18
125	250	22	210	8	18	250	22	210	8	18
150	285	24	240	8	22	285	24	240	8	22
200	340	24	295	8	22	340	24	295	12	22
250	395	26	350	12	22	405	26	355	12	26
300	445	26	400	12	22	460	28	410	12	26
350	505	26	460	16	22	520	30	470	16	26
400	565	26	515	16	26	580	32	525	16	29.5
450	615	28	565	20	26	640	40	585	20	29.5
500	670	28	620	20	26	715	44	650	20	32.5
600	780	34	725	20	29.5	840	54	770	20	35.5
700	895	30	840	24	29.5	910	38	840	24	35.5
800	1015	32	950	24	32.5	1025	38	950	24	39
900	1115	34	1050	28	32.5	1125	40	1050	28	39
1000	1230	34	1160	28	35.5	1255	42	1170	28	42
1200	1455	38	1380	32	39	1485	48	1390	32	48
1400	1675	42	1590	36	42	1685	52	1590	36	48
1600	1915	46	1820	40	48	1930	58	1820	40	55
1800	2115	50	2020	44	48	2130	62	2020	44	55
2000	2325	54	2230	48	48	2345	66	2230	48	60
2200	2550	58	2440	52	55	-	-	-	-	-
2400	2760	62	2650	56	55	-	-	-	-	-
2600	2960	66	2850	60	55	-	-	-	-	-
2800	3180	70	3070	64	55	-	-	-	-	-
3000	3405	75	3290	68	60	-	-	-	-	-

FLANGE DETAILS



TABLE NO. 5

SIZE	BS EN 1092-2 (PN-1.0)					BS EN 1092-2 (PN-1.6)					BS EN 1092-2 (PN-2.5)				
	FLANGE DIA	FLANGE THICK	PCD	NO. OF HOLE	HOLE DIA	FLANGE DIA	FLANGE THICK	PCD	NO. OF HOLE	HOLE DIA	FLANGE DIA	FLANGE THICK	PCD	NO. OF HOLE	HOLE DIA
50	165	19	125	4	19	165	19	125	4	19	165	19	125	4	19
60	175	19	135	4	19	175	19	135	4	19	175	19	135	8	19
65	185	19	145	4	19	185	19	145	4	19	185	19	145	8	19
80	200	19	160	8	19	200	19	160	8	19	200	19	160	8	19
100	220	19	180	8	19	220	19	180	8	19	235	19	190	8	23
125	250	19	210	8	19	250	19	210	8	19	270	19	220	8	28
150	285	19	240	8	23	285	19	240	8	23	300	20	250	8	28
200	340	20	295	8	23	340	20	295	12	23	360	22	310	12	28
250	395	22	350	12	23	405	22	355	12	28	425	24.5	370	12	31
300	445	24.5	400	12	23	460	24.5	410	12	28	485	27.5	430	16	31
350	505	24.5	460	16	23	520	26.5	470	16	28	555	30	490	16	34
400	565	24.5	515	16	28	580	28	525	16	31	620	32	550	16	37
450	615	25.5	565	20	28	640	30	585	20	31	670	34.5	600	20	37
500	670	26.5	620	20	28	715	31.5	650	20	34	730	36.5	660	20	37
600	780	30	725	20	31	840	36	770	20	37	845	42	770	20	41
700	895	32.5	840	24	31	910	39.5	840	24	37	960	46.5	875	24	44
800	1015	35	950	24	34	1025	43	950	24	41	1085	51	990	24	50
900	1115	37.5	1050	28	34	1125	46.5	1050	28	41	1185	55.5	1090	28	50
1000	1230	40	1160	28	37	1255	50	1170	28	44	1320	60	1210	28	57
1100	1340	42.5	1270	32	37	1355	53.5	1270	32	44	1420	64.5	1310	32	57
1200	1455	45	1380	32	41	1485	57	1390	32	50	1530	69	1420	32	57
1400	1675	46	1590	36	44	1685	60	1590	36	50	1755	74	1640	36	62
1500	1785	47.5	1700	36	44	1820	62.5	1710	36	57	1865	77.5	1750	36	62
1600	1915	49	1820	40	50	1930	65	1820	40	57	1975	81	1860	40	62
1800	2115	52	2020	44	50	2130	70	2020	44	57	2195	88	2070	44	70
2000	2325	55	2230	48	50	2345	75	2230	48	62	2425	95	2300	48	70

TABLE NO. 6

SIZE	IS: 6392, TABLE-10, PN-1.0							IS: 6392, TABLE-17, PN-1.6						
	FLANGE DIA	FLANGE THICK	RF DIA	RF THICK	PCD	NO. OF HOLE	HOLE DIA	FLANGE DIA	FLANGE THICK	RF DIA	RF THICK	PCD	NO. OF HOLE	HOLE DIA
10	90	14	40	2	60	4	14	90	14	40	2	60	4	14
15	95	14	45	2	65	4	14	95	14	45	2	65	4	14
20	105	16	58	2	75	4	14	105	16	58	2	75	4	14
25	115	16	68	2	85	4	14	115	16	68	2	85	4	14
32	140	16	78	2	100	4	18	140	16	78	2	100	4	18
40	150	16	88	3	110	4	18	150	16	88	3	110	4	18
50	165	18	102	3	125	4	18	165	18	102	3	125	4	18
65	185	18	122	3	145	4	18	185	18	122	3	145	4	18
80	200	20	138	3	160	8	18	200	20	138	3	160	8	18
100	220	20	158	3	180	8	18	220	20	158	3	180	8	18
125	250	22	188	3	210	8	18	250	22	188	3	210	8	18
150	285	22	212	3	240	8	22	285	22	212	3	240	8	22
175	315	24	242	3	270	8	22	315	24	242	3	270	8	22
200	340	24	268	3	295	8	22	340	24	268	3	295	12	22
250	395	26	320	3	350	12	22	405	26	320	3	355	12	26
300	445	26	370	4	400	12	22	460	28	378	4	410	12	26
350	505	26	430	4	460	16	22	520	32	438	4	470	16	26
400	565	26	482	4	515	16	26	580	36	490	4	525	16	30
500	670	28	585	4	620	20	26	715	44	610	4	650	20	33
600	780	28	685	5	725	20	30	840	52	725	5	770	20	36
700	895	30	800	5	840	24	30	910	58	495	5	840	24	36
800	1015	32	905	5	950	24	33	1025	64	900	5	950	24	39
900	1115	34	1005	5	1050	28	33	1125	72	1000	5	1050	28	39
1000	1230	34	1110	5	1160	28	36	1255	78	1115	5	1170	28	42
1200	1455	38	1330	5	1380	32	39	1485	94	1330	5	1390	32	48
1400	1675	42	1535	5	1590	36	42	-	-	-	-	-	-	-
1600	1915	46	1760	5	1820	40	48	-	-	-	-	-	-	-
1800	2115	50	1960	5	2020	44	48	-	-	-	-	-	-	-
2000	2325	54	2170	5	2230	48	48	-	-	-	-	-	-	-

FLANGE DETAILS



TABLE NO. 7

SIZE	BS: 10, TABLE-D					BS: 10, TABLE-E				
	FLANGE DIA	FLANGE THK	PCD	NO. OF HOLE	HOLE DIA	FLANGE DIA	FLANGE THK	PCD	NO. OF HOLE	HOLE DIA
15	95	4.8	66.7	4	12.7	95	6.4	66.7	4	12.7
20	102	4.8	73.0	4	12.7	102	6.4	73.0	4	12.7
25	114	4.8	82.6	4	12.7	114	7.1	82.6	4	12.7
32	121	6.4	87.3	4	12.7	121	7.9	87.3	4	12.7
40	133	6.4	98.4	4	12.7	133	8.7	98.4	4	12.7
50	152.4	7.9	114.3	4	15.9	152.4	9.5	114.3	4	15.9
65	165	7.9	127.0	4	15.9	165	10.3	127.0	4	15.9
80	184	9.5	146.1	4	15.9	184	11.1	146.1	4	15.9
90	203	9.5	165.1	4	15.9	203	11.9	165.1	8	15.9
100	216	9.5	177.8	4	15.9	216	12.7	177.8	8	15.9
125	254	12.7	209.6	8	15.9	254	14.3	209.6	8	15.9
150	279.4	12.7	235.0	8	15.9	279.4	17.5	235.0	8	19.1
175	305	12.7	260.4	8	15.9	305	19.1	260.4	8	19.1
200	337	12.7	292.1	8	15.9	337	19.1	292.1	8	19.1
225	368	15.9	323.9	8	15.9	368	30.2	323.9	12	19.1
250	406.4	15.9	355.6	8	19.1	406.4	22.2	355.6	12	19.1
300	457	19.1	406.4	12	19.1	457	25.4	406.4	12	22.2
325	489	19.1	438.2	12	19.1	489	25.4	438.2	12	22.2
350	527	22.2	469.9	12	22.2	527	28.6	469.9	12	22.2
375	552.5	22.2	495.3	12	22.2	552.5	31.8	495.3	12	22.2
400	578	22.2	520.7	12	22.2	578	31.8	520.7	12	22.2
425	610	25.4	552.5	12	22.2	610	34.9	552.5	12	22.2
450	641	25.4	584.2	12	22.2	641	34.9	584.2	16	22.2
475	673	25.4	609.6	12	22.2	673	38.1	609.6	16	22.2
500	705	28.6	641.4	16	22.2	705	38.1	641.4	16	22.2
525	737	28.6	673.1	16	22.2	737	41.3	673.1	16	25.4
550	762	28.6	698.5	16	25.4	762	44.5	698.5	16	25.4
575	787.4	28.6	723.9	16	25.4	787.4	44.5	723.9	16	25.4
600	825.5	31.8	755.7	16	25.4	825.5	47.6	755.7	16	28.6

TABLE NO. 8

AWWA C207-94, CLASS B (86 PSI) AND CLASS D (175-150 PSI)													
SIZE (in)	FLANGE DIA (in)	FLANGE THICK (in)		PCD (in)	NO. OF HOLE	HOLE DIA (in)	SIZE (in)	FLANGE DIA (in)	FLANGE THICK (in)		PCD (in)	NO. OF HOLE	HOLE DIA (in)
		Class-B	Class-B						Class-B	Class-D			
4	9	0.625	0.625	7.50	8	0.625	44	55.25	1.125	1.750	51.75	40	1.500
5	10	0.625	0.625	8.50	8	0.750	46	57.25	1.125	1.750	53.75	40	1.500
6	11	0.688	0.688	9.50	8	0.750	48	59.5	1.250	1.875	56.00	44	1.500
8	13.5	0.688	0.688	11.75	8	0.750	50	61.75	1.250	2.000	58.25	44	1.750
10	16	0.688	0.688	14.25	12	0.875	52	64	1.250	2.000	60.50	44	1.750
12	19	0.688	0.812	17.00	12	0.875	54	66.25	1.375	2.125	62.75	44	1.750
14	21	0.688	0.938	18.75	12	1.000	60	73	1.500	2.250	69.25	52	1.750
16	23.5	0.688	1.000	21.25	16	1.000	66	80	1.625	2.500	76.00	52	1.750
18	25	0.688	1.062	22.75	16	1.125	72	86.5	1.750	2.625	82.50	60	1.750
20	27.5	0.688	1.125	25.00	20	1.125	78	93	2.000	2.750	89.00	64	2.000
22	29.5	0.750	1.188	27.25	20	1.250	84	99.75	2.000	2.875	95.50	64	2.000
24	32	0.750	1.250	29.5	20	1.250	90	106.5	2.250	3.000	102.00	68	2.250
26	34.25	0.812	1.312	31.75	24	1.250	96	113.25	2.250	3.250	108.50	68	2.250
28	36.5	0.875	1.312	34.00	28	1.250	102	120	2.500	3.250	114.50	72	2.500
30	38.75	0.875	1.375	36.00	28	1.250	108	126.75	2.500	3.375	120.75	72	2.500
32	41.75	0.938	1.500	38.5	28	1.500	114	133.5	2.750	3.500	126.75	76	2.750
34	43.75	0.938	1.500	40.50	32	1.500	120	140.25	2.750	3.500	132.75	76	2.750
36	46	1.000	1.625	42.75	32	1.500	126	147	3.000	3.750	139.25	80	3.000
38	48.75	1.000	1.625	45.25	32	1.500	132	153.75	3.000	3.875	145.75	80	3.000
40	50.75	1.000	1.625	47.25	36	1.500	138	160.5	3.250	4.000	152.00	84	3.250
42	53	1.125	1.750	49.50	36	1.500	144	167.25	3.250	4.125	158.25	84	3.250