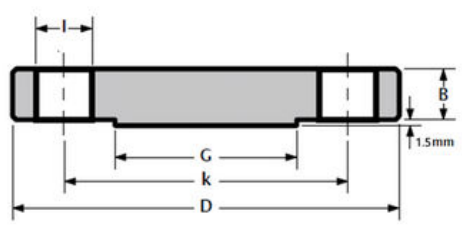


> Weights are approximate

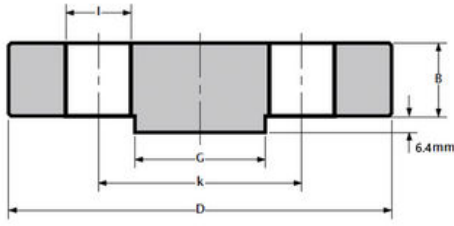
PIPE	FLANGE DATA		RAISED DATA	DRILLING DATA			WEIGHT
Nominal pipe size	Outside diameter	Thickness min.	Face diameter	Number of holes	Bolt hole diameter	Diameter of bolt circle	Kg / piece
NPS	D	B	G		I	k	
1/2"	89	9.6	34.9	4	15.88	60.3	0.47
3/4"	99	11.2	42.9	4	15.88	69.9	0.63
1"	108	12.7	50.8	4	15.88	79.4	0.94
1 1/4"	117	14.3	63.5	4	15.88	88.9	1.23
1 1/2"	127	15.9	73.0	4	15.88	98.4	1.62
2"	152	17.5	92.1	4	19.05	120.7	2.64
2 1/2"	178	20.7	104.8	4	19.05	139.7	4.06
3"	190	22.3	127.0	4	19.05	152.4	4.90
3 1/2"	216	22.3	139.7	8	19.05	177.8	5.90
4"	229	22.3	157.2	8	19.05	190.5	7.41
5"	254	22.3	185.7	8	22.23	215.9	8.76
6"	279	23.9	215.9	8	22.23	241.3	11.31
8"	343	27.0	269.9	8	22.23	298.5	19.92
10"	406	28.6	323.8	12	25.40	362.0	29.39
12"	483	30.2	381.0	12	25.40	431.8	43.70
14"	533	33.4	412.8	12	28.58	476.3	59.42
16"	597	35.0	469.9	16	28.58	539.8	77.11
18"	635	38.1	533.4	16	31.75	577.9	94.80
20"	698	41.3	584.2	20	31.75	635.0	123.38
24"	813	46.1	692.2	20	34.93	749.3	188.24
26" SERIE A	870	66.7	749.0	24	34.93	806.4	306.92
26" SERIE B	786	43.0	711.0	36	22.23	744.5	164.70
28" SERIE A	927	69.9	800.0	28	34.93	863.6	363.80
28" SERIE B	837	46.2	762.0	40	22.23	795.3	200.80
30" SERIE A	984	73.1	857.0	28	34.93	914.4	431.19
30" SERIE B	887	49.3	813.0	44	22.23	846.1	240.60
32" SERIE A	1060	79.4	914.0	28	41.28	977.9	539.39
32" SERIE B	941	52.5	864.0	48	22.23	900.1	287.20
34" SERIE A	1111	81.0	965.0	32	41.28	1028.7	602.55
34" SERIE B	1005	55.7	921.0	40	25.40	957.3	347.90
36" SERIE A	1168	88.9	1022.0	32	41.28	1085.8	733.15
36" SERIE B	1057	57.3	972.0	44	25.40	1009.6	395.50
38" SERIE A	1238	85.8	1073.0	32	41.28	1149.4	798.93
38" SERIE B	1124	62.0	1022.0	40	28.58	1070.0	483.50
40" SERIE A	1289	88.9	1124.0	36	41.28	1200.2	895.04
40" SERIE B	1175	65.2	1080.0	44	28.58	1120.8	553.80
42" SERIE A	1346	95.3	1194.0	36	41.28	1257.3	1048.63
42" SERIE B	1226	66.8	1130.0	48	28.58	1171.6	618.90
44" SERIE A	1403	100.1	1245.0	40	41.28	1314.4	1195.58
44" SERIE B	1276	70.0	1181.0	52	28.58	1222.4	701.40
46" SERIE A	1454	101.6	1295.0	40	41.28	1365.2	1306.29
46" SERIE B	1341	73.1	1235.0	40	31.75	1284.3	813.20
48" SERIE A	1511	106.4	1359.0	44	41.28	1422.4	1476.59
48" SERIE B	1392	76.3	1289.0	44	31.75	1335.1	911.50

1/2" - 24" = ASME B16.5
26" - 48" = ASME B16.47
SERIE A / SERIE B



> Weights are approximate

PIPE	FLANGE DATA		RAISED DATA	DRILLING DATA			WEIGHT
Nominal pipe size	Outside diameter	Thickness min.	Face diameter	Number of holes	Bolt hole diameter	Diameter of bolt circle	Kg / piece
NPS	D	B	G		I	k	
1/2"	95	12.7	34.9	4	15.88	66.7	0.62
3/4"	117	14.3	42.9	4	19.05	82.6	1.16
1"	124	15.9	50.8	4	19.05	88.9	1.42
1 1/4"	133	17.5	63.5	4	19.05	98.4	1.79
1 1/2"	155	19.1	73.0	4	22.23	114.3	2.68
2"	165	20.7	92.1	8	19.05	127.0	3.09
2 1/2"	190	23.9	104.8	8	22.23	149.2	4.75
3"	210	27.0	127.0	8	22.23	168.3	6.79
3 1/2"	229	28.6	139.7	8	22.23	184.2	9.53
4"	254	30.2	157.2	8	22.23	200.0	12.00
5"	279	33.4	185.7	8	22.23	235.0	15.96
6"	318	35.0	215.9	12	22.23	269.9	21.20
8"	381	39.7	269.9	12	25.40	330.2	34.60
10"	444	46.1	323.8	16	28.58	387.4	55.34
12"	521	49.3	381.0	16	31.75	450.8	78.90
14"	584	52.4	412.8	20	31.75	514.4	107.05
16"	648	55.6	469.9	20	34.93	571.5	139.25
18"	711	58.8	533.4	24	34.93	628.6	176.90
20"	775	62.0	584.2	24	34.93	685.8	223.17
24"	914	68.3	692.2	24	41.28	812.8	342.00
26" SERIE A	972	82.6	749.0	28	44.45	876.3	460.10
26" SERIE B	867	87.4	737.0	32	34.93	803.3	390.70
28" SERIE A	1035	88.9	800.0	28	44.45	939.8	566.10
28" SERIE B	921	87.4	787.0	36	34.93	857.2	441.20
30" SERIE A	1092	93.7	857.0	28	47.63	997.0	663.10
30" SERIE B	991	92.1	845.0	36	38.10	920.8	537.90
32" SERIE A	1149	98.5	914.0	28	50.80	1054.1	771.00
32" SERIE B	1054	101.6	902.0	32	41.28	977.9	673.50
34" SERIE A	1206	103.2	965.0	28	50.80	1104.9	893.40
34" SERIE B	1108	101.6	953.0	36	41.28	1031.9	743.50
36" SERIE A	1270	109.6	1022.0	32	53.98	1168.4	1044.10
36" SERIE B	1171	101.6	1010.0	32	44.45	1089.0	834.30
38" SERIE A	1168	106.4	1029.0	32	41.28	1092.2	875.10
38" SERIE B	1222	109.6	1060.0	36	44.45	1139.8	978.60
40" SERIE A	1238	112.8	1086.0	32	44.45	1155.7	1039.10
40" SERIE B	1273	114.3	1114.0	40	44.45	1190.6	1104.30
42" SERIE A	1289	117.5	1137.0	32	44.45	1206.5	1177.70
42" SERIE B	1334	117.5	1168.0	36	47.63	1244.6	1249.70
44" SERIE A	1353	122.3	1194.0	32	47.63	1263.6	1346.70
44" SERIE B	1384	125.5	1219.0	40	47.63	1295.4	1433.90
46" SERIE A	1416	127.0	1245.0	28	50.80	1320.8	1536.70
46" SERIE B	1460	128.6	1270.0	36	50.80	1365.2	1641.00
48" SERIE A	1467	131.8	1302.0	32	50.80	1371.6	1707.20
48" SERIE B	1511	133.4	1327.0	40	50.80	1416.0	1819.70



> Weights are approximate
> 1/2" - 3 1/2" = 600 LBS

PIPE	FLANGE DATA		RAISED DATA	DRILLING DATA			WEIGHT
Nominal pipe size	Outside diameter	Thickness min.	Face diameter	Number of holes	Bolt hole diameter	Diameter of bolt circle	Kg / piece
NPS	D	B	G		I	k	
1/2"	95	14.3	34.9	4	15.88	66.7	0.91
3/4"	117	15.9	42.9	4	19.05	82.6	1.40
1"	124	17.5	50.8	4	19.05	88.9	1.81
1 1/4"	133	20.7	63.5	4	19.05	98.4	2.40
1 1/2"	155	22.3	73.0	4	22.23	114.3	3.40
2"	165	25.4	92.1	8	19.05	127.0	4.40
2 1/2"	190	28.6	104.8	8	22.23	149.2	6.80
3"	210	31.8	127.0	8	22.23	168.3	8.90
3 1/2"	229	35.0	139.7	8	25.40	184.2	13.17
4"	254	35.0	157.2	8	25.40	200.0	14.40
5"	279	38.1	185.7	8	25.40	235.0	19.50
6"	318	41.3	215.9	12	25.40	269.9	27.67
8"	381	47.7	269.9	12	28.58	330.0	45.36
10"	444	54.0	323.8	16	31.75	387.4	68.00
12"	521	57.2	381.0	16	34.93	450.8	98.00
14"	584	60.4	412.8	20	34.93	514.4	131.66
16"	648	63.5	469.9	20	38.10	571.5	167.00
18"	711	66.7	533.4	24	38.10	628.6	206.57
20"	775	69.9	584.2	24	41.28	685.8	261.00
24"	914	76.2	692.2	24	47.63	812.8	395.00
26" SERIE A	972	98.5	749.0	28	47.63	876.3	559.80
26" SERIE B	851	88.9	711.0	28	38.10	781.0	396.60
28" SERIE A	1035	104.8	800.0	28	50.80	939.8	673.40
28" SERIE B	914	95.3	762.0	24	41.28	838.2	492.60
30" SERIE A	1092	111.2	857.0	28	53.98	997.0	795.70
30" SERIE B	972	101.6	819.0	28	41.28	895.4	591.10
32" SERIE A	1149	115.9	914.0	28	53.98	1054.1	923.20
32" SERIE B	1035	108.0	873.0	28	44.45	952.5	710.00
34" SERIE A	1206	122.3	965.0	28	53.98	1104.9	1077.80
34" SERIE B	1086	111.2	927.0	32	44.45	1003.3	798.20
36" SERIE A	1270	128.6	1022.0	32	53.98	1168.4	1252.40
36" SERIE B	1156	119.1	981.0	28	47.63	1066.8	977.20
38" SERIE A	1206	123.9	1035.0	32	47.63	1117.6	1104.80
38" SERIE B	1207	123.9	1035.0	32	47.63	1117.6	1104.80
40" SERIE A	1270	130.2	1092.0	32	50.80	1174.8	1280.90
40" SERIE B	1270	130.2	1092.0	32	50.80	1174.8	1280.90
42" SERIE A	1321	133.4	1143.0	32	50.80	1225.6	1421.54
42" SERIE B	1321	133.4	1143.0	32	50.80	1225.6	1421.54
44" SERIE A	1384	139.7	1200.0	32	53.98	1282.7	1636.10
44" SERIE B	1384	139.7	1200.0	32	53.98	1282.7	1636.10
46" SERIE A	1441	146.1	1257.0	36	53.98	1339.8	1849.20
46" SERIE B	1442	146.1	1257.0	36	53.98	1339.8	1849.20
48" SERIE A	1511	152.4	1308.0	28	60.33	1403.4	2128.80
48" SERIE B	1511	152.4	1308.0	28	60.33	1403.4	2128.80

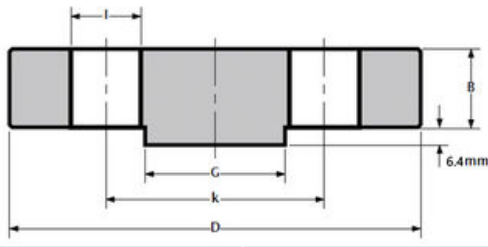
ASTM/ASME A/SA182 - 600LBS

1/2" - 24" = ASME B16.5

26" - 48" = ASME B16.47

SERIE A / SERIE B

**BLINDFLANGE
BLINDFLENS
BLINDFLANSCH
BRIDE PLEINE**



> Weights are approximate

PIPE	FLANGE DATA		RAISED DATA	DRILLING DATA			WEIGHT
Nominal pipe size	Outside diameter	Thickness min.	Face diameter	Number of holes	Bolt hole diameter	Diameter of bolt circle	Kg / piece
NPS	D	B	G		I	k	
1/2"	95	14.3	34.9	4	15.88	66.7	0.91
3/4"	117	15.9	42.9	4	19.05	82.6	1.40
1"	124	17.5	50.8	4	19.05	88.9	1.81
1 1/4"	133	20.7	63.5	4	19.05	98.4	2.40
1 1/2"	155	22.3	73.0	4	22.23	114.3	3.40
2"	165	25.4	92.1	8	19.05	127.0	4.40
2 1/2"	190	28.6	104.8	8	22.23	149.2	6.80
3"	210	31.8	127.0	8	22.23	168.3	8.90
3 1/2"	229	35.0	139.7	8	25.40	184.2	13.17
4"	273	38.1	157.2	8	25.40	215.9	18.60
5"	330	44.5	185.7	8	28.58	266.7	30.84
6"	356	47.7	215.9	12	28.58	292.1	38.00
8"	419	55.6	269.9	12	31.75	349.2	62.20
10"	508	63.5	323.8	16	34.93	431.8	102.00
12"	559	66.7	381.0	20	34.93	489.0	132.00
14"	603	69.9	412.8	20	38.10	527.0	158.00
16"	686	76.2	469.9	20	41.28	603.2	224.73
18"	743	82.6	533.4	20	44.45	654.0	285.00
20"	813	88.9	584.2	24	44.45	723.9	365.00
24"	940	101.6	692.2	24	50.80	838.2	533.45
26" SERIE A	1016	125.5	749.0	28	50.80	914.4	768.90
26" SERIE B	889	111.3	727.0	28	44.45	806.4	527.80
28" SERIE A	1073	131.8	800.0	28	53.98	965.2	900.10
28" SERIE B	952	115.9	784.0	28	47.63	863.6	629.90
30" SERIE A	1130	139.7	857.0	28	53.98	1022.4	1065.20
30" SERIE B	1022	127.0	841.0	28	50.80	927.1	794.00
32" SERIE A	1194	147.7	914.0	28	60.33	1079.5	1243.30
32" SERIE B	1086	134.9	895.0	28	53.98	984.2	949.60
34" SERIE A	1245	154.0	965.0	28	60.33	1130.3	1417.30
34" SERIE B	1162	144.2	953.0	24	60.33	1054.1	1165.10
36" SERIE A	1314	162.0	1022.0	28	66.68	1193.8	1652.50
36" SERIE B	1213	150.9	1010.0	28	60.33	1104.9	1320.40
38" SERIE A	1270	155.0	1054.0	28	60.33	1162.0	1499.60
38" SERIE B	1270	155.0	1054.0	28	60.33	1162.0	1499.60
40" SERIE A	1321	162.0	1111.0	32	60.33	1212.8	1683.90
40" SERIE B	1321	162.0	1111.0	32	60.33	1212.8	1683.90
42" SERIE A	1403	171.5	1168.0	28	66.68	1282.7	2015.40
42" SERIE B	1403	171.5	1168.0	28	66.68	1282.7	2015.40
44" SERIE A	1454	177.8	1226.0	32	66.68	1333.5	2233.90
44" SERIE B	1454	177.8	1226.0	32	66.68	1333.5	2233.90
46" SERIE A	1511	185.8	1276.0	32	66.68	1390.6	2530.30
46" SERIE B	1511	185.8	1276.0	32	66.68	1390.6	2530.30
48" SERIE A	1594	195.3	1334.0	32	73.03	1460.5	2939.10
48" SERIE B	1594	195.3	1334.0	32	73.03	1460.5	2939.10

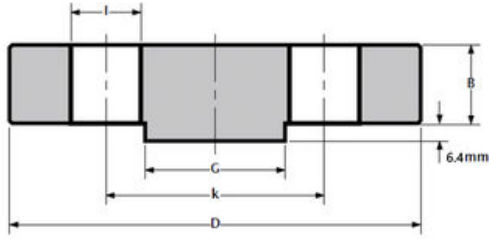
ASTM/ASME A/SA182 - 900LBS

1/2" - 24" = ASME B16.5

26" - 48" = ASME B16.47

SERIE A / SERIE B

**BLINDFLANGE
BLINDFLENS
BLINDFLANSCH
BRIDE PLEINE**



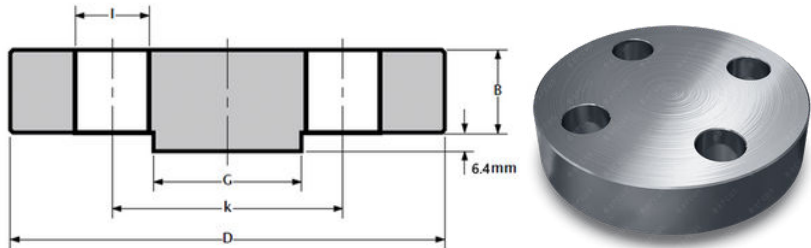
> Weights are approximate
> 1/2" - 2 1/2" = 1500 LBS

PIPE	FLANGE DATA		RAISED DATA	DRILLING DATA			WEIGHT
Nominal pipe size	Outside diameter	Thickness min.	Face diameter	Number of holes	Bolt hole diameter	Diameter of bolt circle	Kg / piece
NPS	D	B	G		I	k	
1/2"	121	22.3	34.9	4	22.23	82.6	1.90
3/4"	130	25.4	42.9	4	22.23	88.9	2.72
1"	149	28.6	50.8	4	25.40	101.6	4.08
1 1/4"	159	28.6	63.5	4	25.40	111.1	4.30
1 1/2"	178	31.8	73.0	4	28.58	123.8	5.90
2"	216	38.1	92.1	8	25.40	165.1	11.30
2 1/2"	244	41.3	104.8	8	28.58	190.5	16.00
3"	241	38.1	127.0	8	25.40	190.5	13.17
4"	292	44.5	157.2	8	31.75	235.0	24.50
5"	349	50.8	185.7	8	34.93	279.4	39.46
6"	381	55.6	215.9	12	31.75	317.5	51.50
8"	470	63.5	269.9	12	38.10	393.7	89.00
10"	546	69.9	323.8	16	38.10	469.9	131.54
12"	610	79.4	381.0	20	38.10	533.4	187.00
14"	641	85.8	412.8	20	41.28	558.8	224.07
16"	705	88.9	469.9	20	44.45	616.0	272.40
18"	787	101.6	533.4	20	50.80	685.8	385.90
20"	857	108.0	584.2	20	53.98	749.3	488.00
24"	1041	139.7	692.2	20	66.68	901.7	905.00
26" SERIE A	1086	160.4	749.0	20	73.03	952.5	1087.40
26" SERIE B	1022	154.0	762.0	20	66.68	901.7	935.80
28" SERIE A	1168	171.5	800.0	20	79.38	1022.4	1342.80
28" SERIE B	1105	166.7	819.0	20	73.03	971.6	1177.00
30" SERIE A	1232	182.6	857.0	20	79.38	1085.8	1602.80
30" SERIE B	1181	176.1	876.0	20	79.38	1035.0	1415.60
32" SERIE A	1314	193.7	914.0	20	85.73	1155.7	1929.40
32" SERIE B	1238	186.0	927.0	20	79.38	1092.2	1654.30
34" SERIE A	1397	204.8	965.0	20	92.08	1225.6	2299.20
34" SERIE B	1314	195.0	991.0	20	85.73	1155.7	1950.00
36" SERIE A	1460	214.4	1022.0	20	92.08	1289.0	2651.50
36" SERIE B	1346	201.7	1029.0	24	79.38	1200.2	2001.50
38" SERIE A	1460	215.9	1099.0	20	92.08	1289.0	2676.40
38" SERIE B	1460	215.9	1099.0	20	92.08	1289.0	2676.40
40" SERIE A	1511	223.9	1162.0	24	92.08	1339.8	2940.50
40" SERIE B	1511	223.9	1162.0	24	92.08	1339.8	2940.50
42" SERIE A	1562	231.8	1213.0	24	92.08	1390.6	3271.10
42" SERIE B	1562	231.8	1213.0	24	92.08	1390.6	3271.10
44" SERIE A	1648	242.9	1270.0	24	98.4	1463.7	3801.10
44" SERIE B	1648	242.9	1270.0	24	98.4	1463.7	3801.10
46" SERIE A	1734	255.6	1334.0	24	104.78	1536.7	4414.60
46" SERIE B	1734	255.6	1334.0	24	104.78	1536.7	4414.60
48" SERIE A	1784	263.6	1384.0	24	104.78	1587.5	4850.40
48" SERIE B	1784	263.6	1384.0	24	104.78	1587.5	4850.40

ASTM/ASME A/SA182 - 1500LBS

1/2" - 24" = ASME B16.5
 26" - 48" = ASME B16.47
 SERIE A / SERIE B

BLINDFLANGE
 BLINDFLENS
 BLINDFLANSCH
 BRIDE PLEINE



> Weights are approximate

PIPE	FLANGE DATA		RAISED DATA	DRILLING DATA			WEIGHT
Nominal pipe size	Outside diameter	Thickness min.	Face diameter	Number of holes	Bolt hole diameter	Diameter of bolt circle	Kg / piece
NPS	D	B	G		I	k	
1/2"	121	22.3	34.9	4	22.23	82.6	1.90
3/4"	130	25.4	42.9	4	22.23	88.9	2.72
1"	149	28.6	50.8	4	25.40	101.6	4.08
1 1/4"	159	28.6	63.5	4	25.40	111.1	4.30
1 1/2"	178	31.8	73.0	4	28.58	123.8	5.90
2"	216	38.1	92.1	8	25.40	165.1	11.30
2 1/2"	244	41.3	104.8	8	28.58	190.5	16.00
3"	267	47.7	127.0	8	31.75	203.2	21.79
4"	311	54.0	157.2	8	34.93	241.3	33.11
5"	375	73.1	185.7	8	41.28	292.1	60.00
6"	394	82.6	215.9	12	38.10	317.5	75.00
8"	483	92.1	269.9	12	44.45	393.7	136.98
10"	584	108.0	323.8	12	50.80	482.6	229.97
12"	673	123.9	381.0	16	53.98	571.5	316.00
14"	749	133.4	412.8	16	60.33	635.0	421.00
16"	826	146.1	469.9	16	66.68	704.8	559.00
18"	914	162.0	533.4	16	73.03	774.7	671.00
20"	984	177.8	584.2	16	79.38	831.8	967.00
24"	1168	203.2	692.2	16	92.08	990.6	1568.00

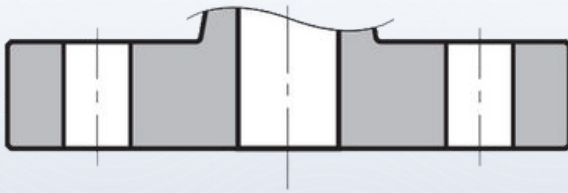
ASTM/ASME A/SA182 - 2500LBS

> Weights are approximate

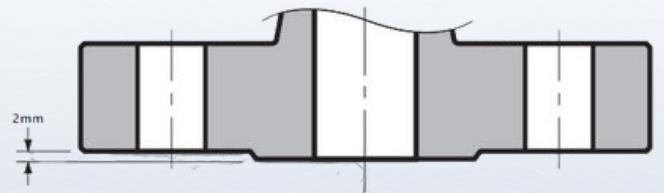
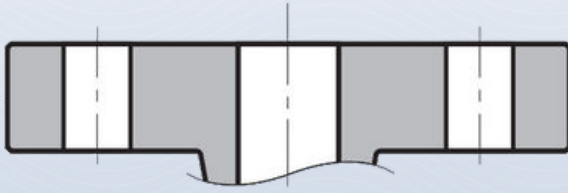
PIPE	FLANGE DATA		RAISED DATA	DRILLING DATA			WEIGHT
Nominal pipe size	Outside diameter	Thickness min.	Face diameter	Number of holes	Bolt hole diameter	Diameter of bolt circle	Kg / piece
NPS	D	B	G		I	k	
1/2"	133	30.2	34.9	4	22.23	88.9	3.18
3/4"	140	31.8	42.9	4	22.23	95.2	4.54
1"	159	35.0	50.8	4	25.40	108.0	5.44
1 1/4"	184	38.1	63.5	4	28.58	130.2	8.16
1 1/2"	203	44.5	73.0	4	31.75	146.0	10.44
2"	235	50.9	92.1	8	28.58	171.4	17.71
2 1/2"	267	57.2	104.8	8	31.75	196.8	25.42
3"	305	66.7	127.0	8	34.93	228.6	39.04
4"	356	76.2	157.2	8	41.28	273.0	60.38
5"	419	92.1	185.7	8	47.63	323.8	101.15
6"	483	108.0	215.9	8	53.98	368.3	156.63
8"	552	127.0	269.9	12	53.98	438.2	240.62
10"	673	165.1	323.8	12	66.68	539.8	465.36
12"	762	184.2	381.0	12	73.03	619.1	664.06

FLANGE FACING TYPES

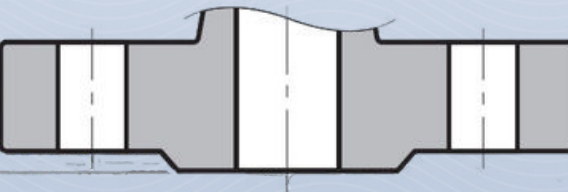
ASTM A182 ASME B16.5



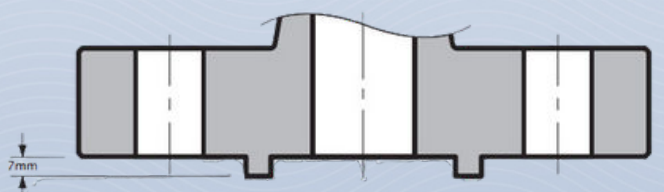
FLAT FACE



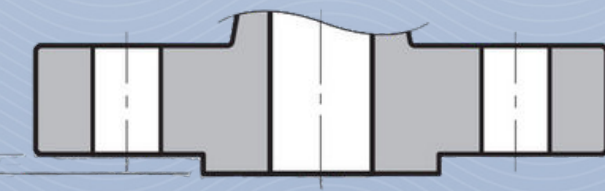
RAISED FACE (150 - 300LBS)



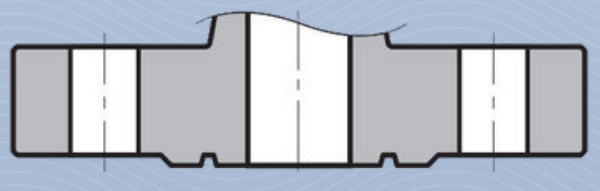
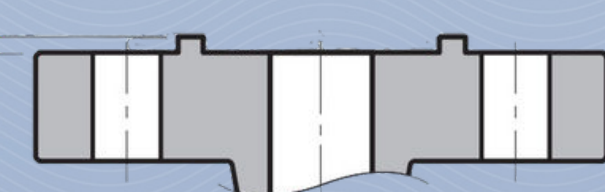
RAISED FACE (400LBS AND UP)



TONGUE AND GROOVE FACE



MALE AND FEMALE FACE



RING TYPE JOINT FACE

