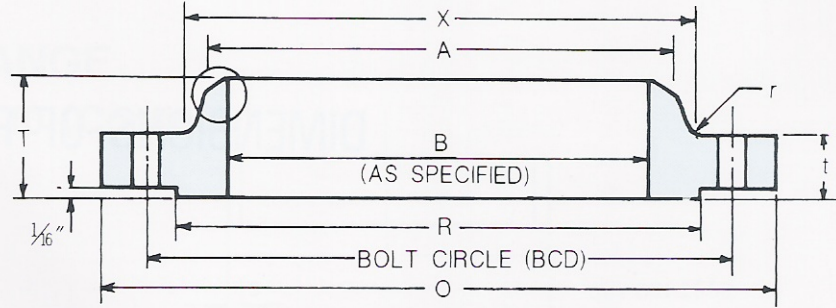
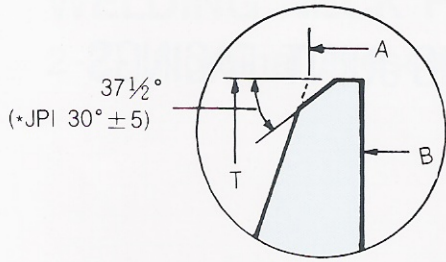


# 75Lbs, 150Lbs, 300Lbs

API 605

## WELDING NECK & INTEGRAL FLANGES (Large Diameter)



WELDING NECK FLANGE

Unit: millimeters

### 75Lbs. Nominal Rating

Nominal Size	Welding Neck and Integral Flanges								
	Flange Outside Diameter O	Flange Thickness t	Raised-Face Diameter R	Drilling				Bolt Length	
				Bolt-Circle Diameter (BCD)	Number of Bolts	Bolt Diameter (Inches)	Bolt-Hole Diameter	Machine Bolt L'	Stud Bolt L
26	762	33.5	704.8	723.9	36	5/8	19.0	102	114
28	813	33.5	755.6	774.7	40	5/8	19.0	102	114
30	864	33.5	808.4	825.5	44	5/8	19.0	102	114
32	914	35.0	857.2	876.3	48	5/8	19.0	108	121
34	965	35.0	908.0	927.1	52	5/8	19.0	108	121
36	1033	37.0	965.2	992.2	40	3/4	22.2	114	127
38	1084	38.5	1016.0	1043.0	40	3/4	22.2	114	133
40	1135	38.5	1066.8	1093.8	44	3/4	22.2	114	133
42	1186	40.0	1117.6	1144.6	48	3/4	22.2	121	133
44	1251	41.5	1174.8	1203.3	36	7/8	25.4	140	152
46	1302	44.5	1225.8	1254.1	40	7/8	25.4	140	152
48	1353	46.0	1276.4	1304.9	44	7/8	25.4	140	152
50	1403	47.6	1327.2	1355.7	44	7/8	25.4	140	152
52	1457	47.6	1378.0	1409.7	48	7/8	25.4	140	152
54	1508	49.5	1428.8	1460.5	48	7/8	25.4	146	159
56	1575	50.8	1485.9	1520.8	40	1	28.6	159	178
58	1626	52.4	1536.7	1571.6	44	1	28.6	159	178
60	1676	56.0	1587.5	1622.4	44	1	28.6	159	178

### 150Lbs. Nominal Rating

26	786	41.3	711.2	744.5	36	3/4	22.2	121	140
28	837	44.4	762.0	795.3	40	3/4	22.2	127	146
30	887	44.4	812.8	846.1	44	3/4	22.2	127	146
32	941	46.0	863.6	900.1	48	3/4	22.2	133	146
34	1005	49.2	920.8	957.3	40	7/8	25.4	146	159
36	1057	52.4	971.6	1009.6	44	7/8	25.4	152	165
38	1124	54.0	1022.4	1070.0	40	1	28.6	165	184
40	1175	55.6	1079.5	1120.8	44	1	28.6	165	184
42	1226	58.7	1130.3	1171.6	48	1	28.6	165	184
44	1276	60.3	1181.1	1222.4	52	1	28.6	165	184
46	1341	61.9	1235.1	1284.3	40	1 1/8	31.8	165	184
48	1392	65.1	1289.0	1335.1	44	1 1/8	31.8	184	203
50	1443	68.3	1339.8	1385.9	48	1 1/8	31.8	184	203
52	1494	69.8	1390.6	1436.7	52	1 1/8	31.8	184	203
54	1549	71.4	1441.4	1492.2	56	1 1/8	31.8	197	216
56	1600	73.0	1492.3	1543.0	50	1 1/8	31.8	197	216
58	1675	74.6	1543.0	1611.3	48	1 1/4	34.9	210	235
60	1726	76.2	1600.2	1662.1	52	1 1/4	34.9	210	235

### 300Lbs. Nominal Rating

26	867	88.9	736.6	803.3	32	1 1/4	34.9	235	260
28	921	88.9	787.4	857.2	36	1 1/4	34.9	235	260
30	991	93.7	844.6	920.8	36	1 3/8	38.1	248	273
32	1054	103.2	901.7	977.9	32	1 1/2	41.3	273	298
34	1108	103.2	952.5	1031.9	36	1 1/2	41.3	273	298
36	1172	103.2	1009.6	1089.0	32	1 5/8	44.4	273	305
38	1222	111.1	1060.4	1139.8	36	1 5/8	44.4	273	305
40	1273	115.9	1114.4	1190.6	40	1 5/8	44.4	273	305
42	1334	119.1	1168.4	1244.6	36	1 3/4	47.6	311	343
44	1384	127.0	1219.2	1295.4	40	1 3/4	47.6	311	343
46	1460	128.6	1270.0	1365.2	36	1 7/8	50.8	330	368
48	1511	128.6	1327.2	1416.0	40	1 7/8	50.8	330	368
50	1562	138.1	1378.0	1466.8	44	1 7/8	50.8	330	368
52	1613	142.9	1428.8	1517.6	48	1 7/8	50.8	330	368
54	1673	136.5	1479.6	1578.0	48	1 7/8	50.8	349	387
56	1765	154.0	1536.7	1651.0	36	2 1/4	60.3	387	432
58	1827	154.0	1593.8	1712.9	40	2 1/4	60.3	387	432
60	1878	150.8	1651.0	1763.7	40	2 1/4	60.3	387	432

### TOLERANCE

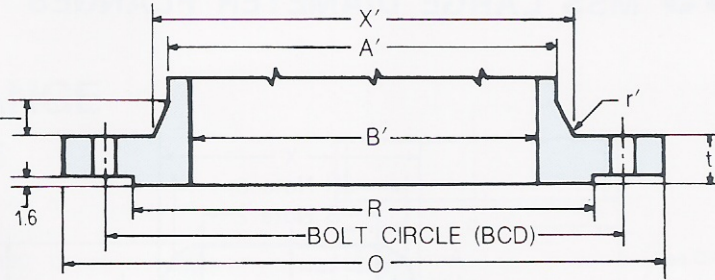
Dimension	Tolerance millimeters
Outside diameter of raised face (R)	± 0.8
Flange thickness (t)	+ 4.8, - 0
Overall hub length (T)	± 3.2
Inside diameter of welding-neck flange (B)	± 0.8
Back-to-face parallelism of flange	+ 3.2 - 1.6

### 1.GENERAL

The 3/16-in. tolerance on flange thickness applies, either with or without back-facing or spot-facing, to the thickness at any point on the nut bearing surface



57.2 FOR 300 PSI  
28.6 FOR 150 PSI  
0 FOR 75PSI



**INTEGRAL FLANGE**

**75Lbs. Nominal Rating**

Unit : millimeters

Nominal Size	Welding Neck and				Integral Flanges			
	Diameter at Large End of Hub	Diameter at Small End of Hub	Overall Length	Fillet Radius	Diameter at Large End of Neck	Diameter at Small End of Neck	Inside Diameter	Fillet Radius
	X	A	T	r	X'	A'	B' <sup>c</sup>	r'
26	676.3	662.0	58.7	7.9	676.3	676.3	644.5	9.5
28	727.1	712.8	61.9	7.9	727.1	727.1	695.3	9.5
30	777.9	763.6	65.1	7.9	777.9	777.9	746.1	9.5
32	828.7	814.4	69.8	7.9	828.7	828.7	795.3	9.5
34	879.5	865.2	73.0	7.9	879.5	879.5	844.6	12.7
36	935.0	916.0	85.7	9.5	935.0	935.0	895.4	12.7
38	985.8	966.8	88.9	9.5	985.8	985.8	946.2	12.7
40	1036.6	1017.6	92.1	9.5	1036.6	1036.6	995.4	12.7
42	1087.4	1068.4	95.2	9.5	1087.4	1087.4	1046.2	12.7
44	1139.8	1119.2	104.8	9.5	1139.8	1139.8	1095.4	12.7
46	1190.6	1170.0	108.0	9.5	1190.6	1190.6	1146.2	12.7
48	1241.4	1220.8	111.1	9.5	1241.4	1241.4	1195.4	12.7
50	1293.8	1271.6	115.9	9.5	1292.4	1292.4	1246.2	12.7
52	1344.6	1322.6	120.7	9.5	1346.2	1346.2	1297.0	12.7
54	1397.0	1373.2	125.4	9.5	1397.0	1397.0	1347.8	15.9
56	1451.0	1424.0	134.9	11.1	1451.0	1451.0	1397.0	15.9
58	1501.8	1474.8	138.1	11.1	1501.8	1501.8	1447.8	15.9
60	1552.6	1525.6	144.5	11.1	1552.6	1552.6	1498.6	15.9

**150Lbs. Nominal Rating**

26	684.2	662.0	88.9	9.5	687.4	676.3	642.9	12.7
28	735.0	712.8	95.2	9.5	738.2	727.1	690.6	12.7
30	787.4	763.6	100.0	9.5	789.0	777.9	739.8	12.7
32	839.8	814.4	108.0	9.5	843.0	831.8	792.2	12.7
34	892.2	865.2	110.3	9.5	893.8	882.6	839.8	12.7
36	944.6	916.0	117.5	9.5	946.2	935.0	890.6	12.7
38	997.0	968.4	123.8	9.5	1000.1	989.0	939.8	12.7
40	1049.3	1019.2	128.6	9.5	1050.9	1039.8	989.0	12.7
42	1101.7	1070.0	133.4	11.1	1101.7	1090.6	1038.2	15.9
44	1152.5	1120.8	136.5	11.1	1152.5	1141.4	1089.0	15.9
46	1204.9	1171.6	144.5	11.1	1208.1	1197.0	1138.2	15.9
48	1257.3	1222.4	149.2	11.1	1258.9	1247.8	1187.4	15.9
50	1308.1	1273.2	154.0	11.1	1309.7	1298.6	1238.2	15.9
52	1369.5	1324.0	157.2	11.1	1365.0	1349.4	1289.0	15.9
54	1412.9	1374.8	161.9	11.1	1416.0	1404.9	1339.8	15.9
56	1465.3	1425.6	166.7	14.3	1466.8	1455.7	1390.6	19.0
58	1516.1	1476.4	174.6	14.3	1522.4	1511.3	1438.2	19.0
60	1570.0	1527.2	179.4	14.3	1573.2	1562.1	1485.9	19.0

**300Lbs. Nominal Rating**

26	701.7	665.2	144.5	14.3	714.4	689.0	635.0	15.9
28	755.6	716.0	149.2	14.3	768.4	743.0	685.8	15.9
30	812.8	768.4	158.0	14.3	825.5	800.1	736.6	15.9
32	863.6	819.2	168.3	15.9	876.3	850.9	781.0	19.0
34	917.6	870.0	173.0	15.9	930.3	904.9	831.8	19.0
36	965.2	920.8	181.0	15.9	981.1	955.7	876.3	19.0
38	1016.0	971.6	192.1	15.9	1031.9	1006.5	927.1	19.0
40	1066.8	1022.4	198.4	15.9	1082.7	1050.9	977.9	19.0
42	1117.8	1074.7	204.8	15.9	1130.3	1101.7	1022.4	19.0
44	1173.2	1125.5	214.3	15.9	1181.1	1158.9	1071.6	19.0
46	1228.7	1176.3	222.2	15.9	1244.6	1216.0	1120.8	19.0
48	1277.9	1227.1	223.8	15.9	1295.4	1266.8	1168.4	19.0
50	1330.3	1277.9	235.0	15.9	1346.2	1317.6	1217.6	19.0
52	1382.7	1328.7	242.9	15.9	1397.0	1368.4	1266.8	19.0
54	1435.1	1379.5	239.7	15.9	1457.3	1428.8	1314.4	22.2
56	1493.8	1430.3	268.3	17.5	1511.3	1482.7	1363.7	22.2
58	1547.8	1481.1	274.6	17.5	1573.2	1544.6	1412.9	22.2
60	1598.6	1531.9	271.5	17.5	1624.0	1692.3	1460.5	22.2

The 0.03-in. tolerance applies, either with or without back-facing or spot-facing, to the parallelism between the flange face and nut bearing surface on back of flange.

**1.GENERAL**

Tolerances for the welding end of a welding neck flange shall be in conformance with ANSI B16.5