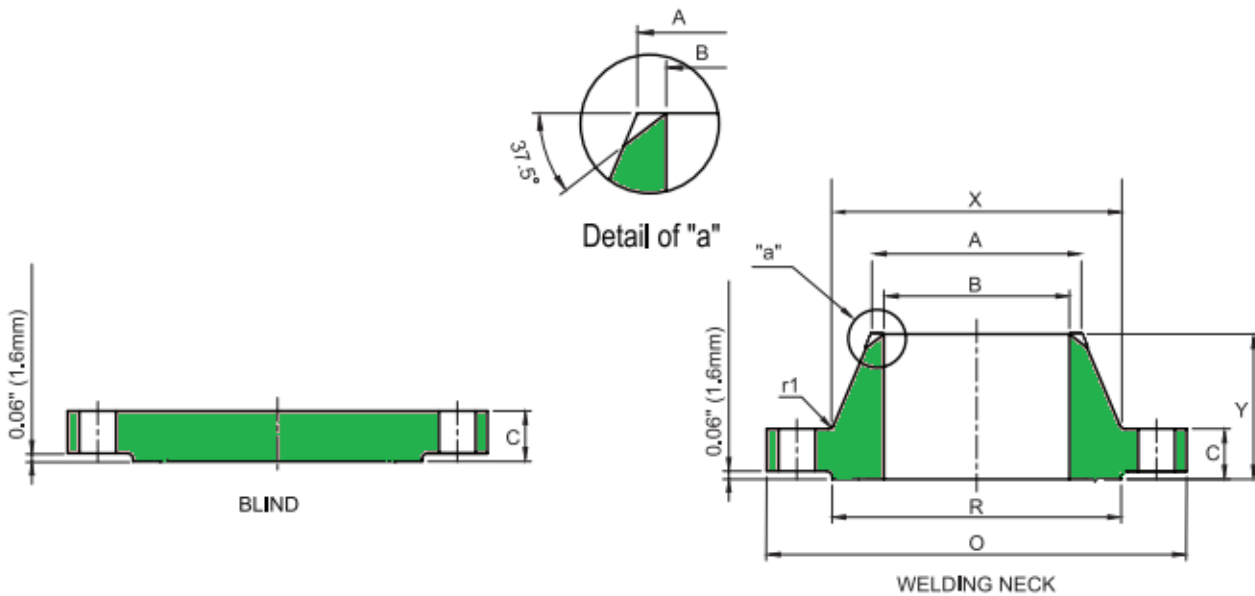


# Dimensions of class 150 Series A Flanges

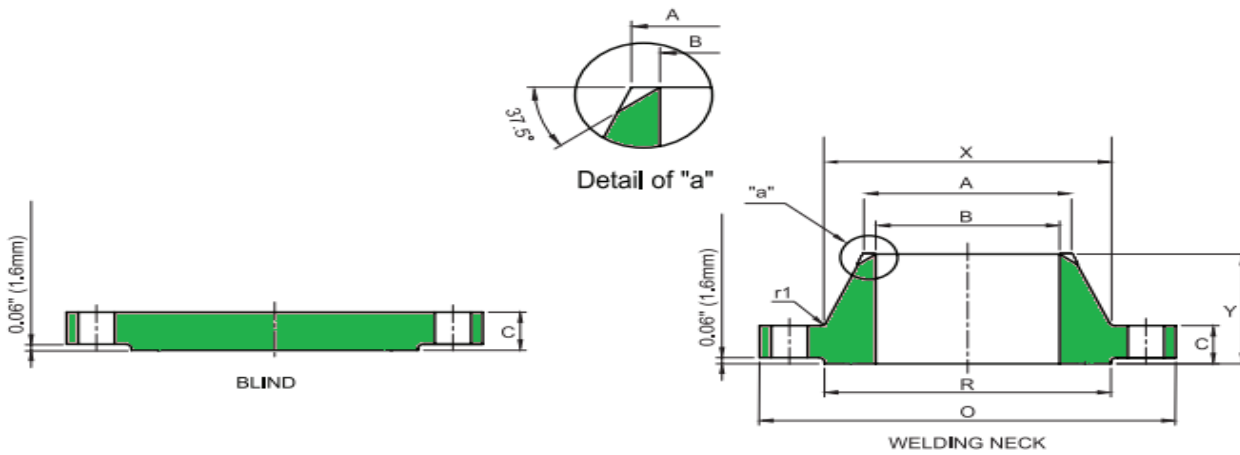
ASME B 16.47-2011



Nominal Pipe Size NPS	Outside Dia. Of Flange O	Minimum Thickness Of Flange, C		Length Through hub Y	Diam. Of Hub X	Hub Diam. Top A	Raised Face Diam R	Drilling			Diam. Of Bolt, in.	Minimum Fillet Radius, r1
		WN	BLIND					Diam. Of Bolt Circle	No. of Bolt Holes	Diam. of bolt Hole, mm		
26	870	66.7	66.7	119	676	660.4	749	806.4	24	34.9	1 1/4"	10
28	925	69.9	69.9	124	727	711.2	800	863.6	28	34.9	1 1/4"	11
30	985	73.1	73.1	135	781	762.0	857	914.4	28	34.9	1 1/4"	11
32	1060	79.4	79.4	143	832	812.8	914	977.9	28	41.3	1 1/2"	11
34	1110	81.0	81.0	148	883	868.6	965	10289.7	32	41.3	1 1/2"	13
36	1170	88.9	88.9	156	933	914.4	1022	1085.8	32	41.3	1 1/2"	13
38	1240	85.8	85.8	156	991	965.2	1073	1149.4	32	41.3	1 1/2"	13
40	1290	88.9	88.9	162	1041	1016.0	1124	1200.2	36	41.3	1 1/2"	13
42	1345	95.3	95.3	170	1092	1066.8	1194	1257.3	36	41.3	1 1/2"	13
44	1405	100.1	100.1	176	1143	1117.6	1245	1314.4	40	41.3	1 1/2"	13
46	1455	101.6	101.6	184	1197	1168.4	1295	1365.2	40	41.3	1 1/2"	13
48	1510	106.4	106.4	191	1248	1219.2	1359	1422.4	44	41.3	1 1/2"	13
50	1570	109.6	109.6	202	1302	1270.0	1410	1479.6	44	47.6	1 3/4"	13
52	1625	114.3	114.3	208	1353	1320.8	1461	1536.7	44	47.6	1 3/4"	13
54	1685	119.1	119.1	214	1403	1371.6	1511	1593.8	44	47.6	1 3/4"	13
56	1745	122.3	122.3	227	1457	1422.4	1575	1651.0	48	47.6	1 3/4"	13
58	1805	127.0	127.0	233	1508	1473.2	1626	1708.2	48	47.6	1 3/4"	13
60	1855	130.2	130.2	238	1559	1524.0	1676	1759.0	52	47.6	1 3/4"	13

# Dimension of Class 300 Series A Flanges

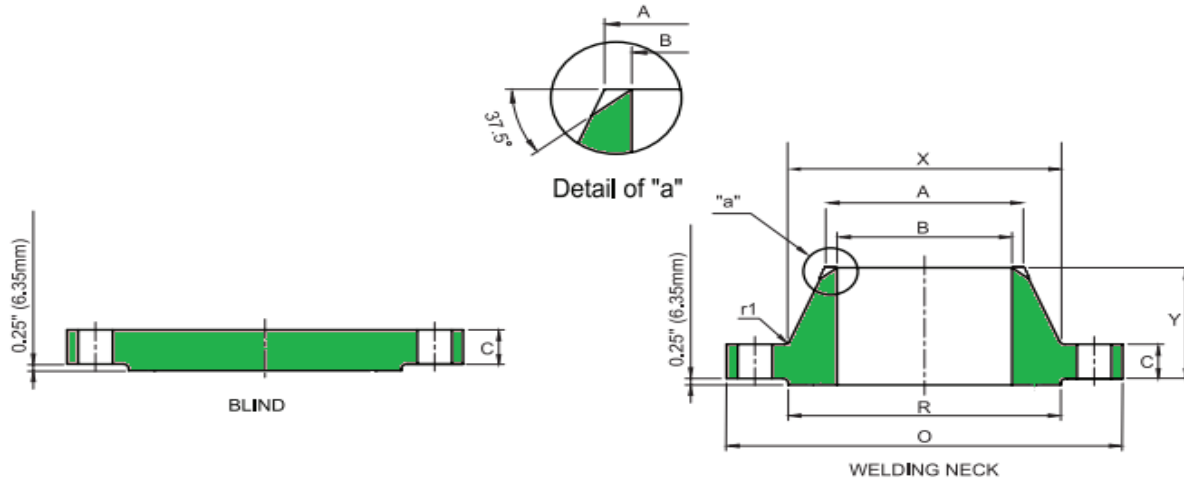
ASME B 16.47- 2011



Nominal Pipe Size NPS	Outside Dia. Of Flange O	Minimum Thickness Of Flange, C		Length Through hub y	Diam. Of Hub x	Hub Diam. Top A	Raised Face Diam R	Drilling			Diam. Of Bolt, in.	Minimum Fillet Radius, r1
		WN	BLIND					Diam. Of Bolt Circle	No. of Bolt Holes	Diam. of bolt Hole, mm		
26	970	77.8	82.6	183	721	660.4	746	876.3	28	44.5	1 5/8"	10
28	1035	84.2	88.9	195	775	711.2	800	939.8	28	44.5	1 5/8"	11
30	1090	90.5	90.5	208	857	762.0	857	997.0	28	47.6	1 3/4"	11
32	1150	96.9	96.9	221	881	812.8	914	1054.1	28	50.8	1 7/8"	11
34	1205	100.1	100.1	230	937	863.6	965	1104.9	28	50.8	1 7/8"	13
36	1270	103.2	103.2	240	991	914.4	1022	1168.4	32	54.0	2"	13
38	1170	106.4	106.4	179	994	965.2	1029	1092.2	32	41.3	1 1/2"	13
40	1240	112.8	112.8	192	1048	1016.0	1086	1155.7	32	44.5	1 5/8"	13
42	1290	117.5	117.5	198	1099	1066.8	1137	1206.5	32	44.5	1 5/8"	13
44	1355	122.3	122.3	205	1149	1117.6	1194	1263.6	32	47.6	1 3/4"	13
46	1415	127.0	127.0	214	1203	1168.4	1245	1320.8	28	50.8	1 7/8"	13
48	1465	131.8	131.8	222	1254	1291.2	1302	1371.6	32	50.8	1 7/8"	13
50	1530	138.2	138.2	230	1305	1270.0	1359	1428.8	32	54.0	2"	13
52	1580	150.9	142.9	237	1356	1320.8	1410	1479.6	32	54.0	2"	13
54	1660	152.9	150.9	251	1410	1371.6	1467	1549.4	28	60.3	2 1/2"	13
56	1710	152.4	152.4	259	1464	1422.4	1518	1600.2	32	60.3	2 1/4"	13
58	1760	157.2	157.2	265	1514	1473.2	1575	1651.4	32	60.3	2 1/4"	13
60	1810	162.0	162.0	271	1565	1524.0	1626	1701.8	32	60.3	2 1/4"	13

# Dimension of Class 400 Series A Flanges

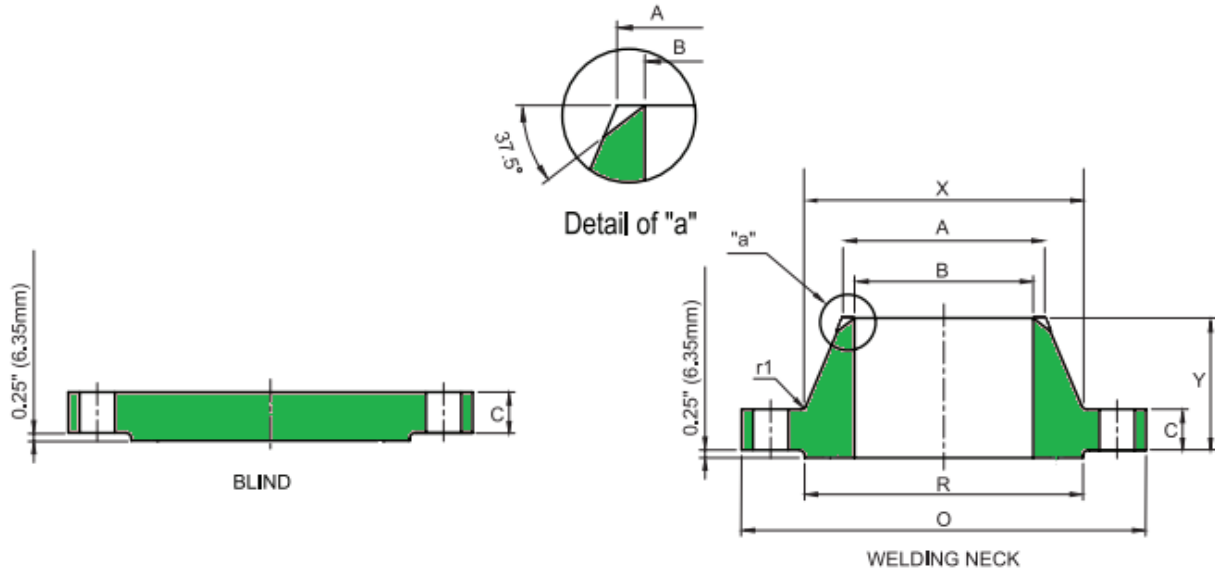
ASME B 16.47- 2011



Nominal Pipe Size NPS	Outside Dia. Of Flange O	Minimum Thickness Of Flange, C		Length Through hub Y	Diam. Of Hub X	Hub Diam. Top A	Raised Face Diam R	Drilling			Diam. Of Bolt, in.	Minimum Fillet Radius, r1
		WN	BLIND					Diam. Of Bolt Circle	No. of Bolt Holes	Diam. of bolt Hole, mm		
26	970	88.9	98.5	194	727	660.4	749	876.3	28	47.6	1 1/4"	11
28	1035	95.3	104.8	206	783	711.2	800	939.8	28	50.8	1 7/8"	13
30	1090	101.6	111.2	219	837	762.0	857	997.0	28	54.0	2"	13
32	1150	108.0	115.9	232	889	812.8	914	1054.1	28	54.0	2"	13
34	1205	111.2	122.3	241	945	868.8	965	1104.9	28	54.0	2"	14
36	1270	114.3	128.6	251	1000	914.4	1022	1168.4	32	54.0	2"	14
38	1205	123.9	123.9	206	1003	965.2	1035	1117.6	32	47.6	1 1/4"	14
40	1270	130.2	130.2	216	1054	1016.0	1092	1174.8	32	50.8	1 7/8"	14
42	1320	133.4	133.4	224	1108	1066.8	1143	1225.6	32	50.8	1 7/8"	14
44	1385	139.7	139.7	233	1159	1117.6	1200	1282.7	32	54.0	2"	14
46	1440	146.1	146.1	244	1213	1168.4	1257	1339.8	36	54.0	2"	14
48	1510	152.4	152.4	257	1267	1219.2	1308	1403.4	28	60.3	2 1/4"	14
50	1570	157.2	158.8	268	1321	1270.0	1362	1460.5	32	60.3	2 1/4"	14
52	1620	162.0	163.6	276	1372	1320.8	1413	1511.3	32	60.3	2 1/4"	14
54	1700	169.9	171.5	289	1426	1371.6	1470	1581.2	28	66.7	2 1/2"	14
56	1755	174.7	176.3	298	1480	1422.4	1527	1632.0	32	66.7	2 1/2"	14
58	1805	177.8	181.0	306	1530	1473.2	1578	1682.8	32	66.7	2 1/2"	14
60	1885	185.8	189.0	319	1584	1524.0	1635	1752.6	32	73.0	2 3/4"	14

# Dimension of Class 600 Series A Flanges

ASME B 16.47- 2011

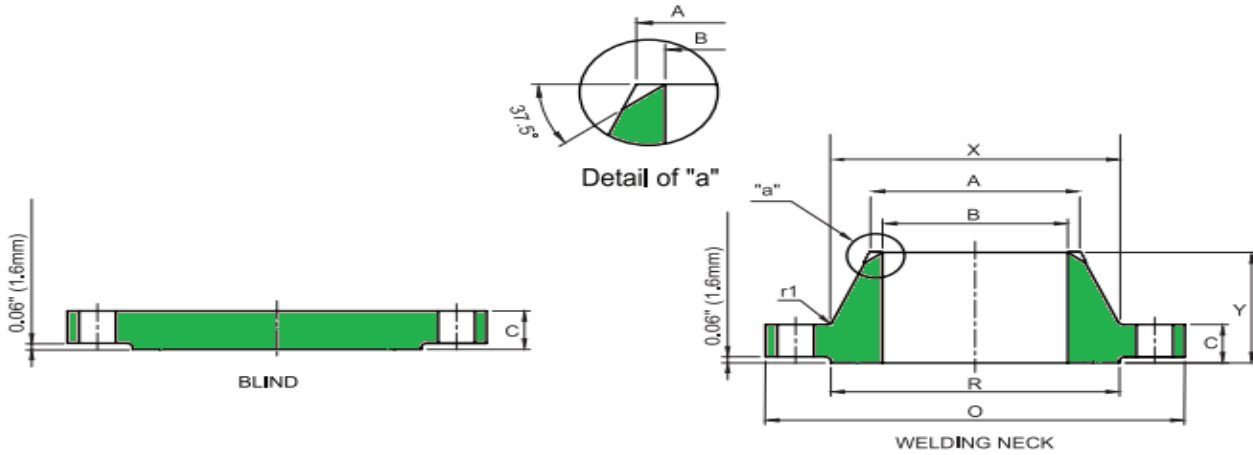


Nominal Pipe Size NPS	Outside Dia. Of Flange O	Minimum Thickness Of Flange, C		Length Through hub Y	Diam. Of Hub X	Hub Diam. Top A	Raised Face Diam R	Drilling			Diam. Of Bolt, in.	Minimum Fillet Radius, r1
		WN	BLIND					Diam. Of Bolt Circle	No. of Bolt Holes	Diam. of bolt Hole, mm		
26	1015	108.0	125.5	222	748	660.4	749	914.4	28	50.8	1 7/8"	13
28	1075	111.2	131.8	235	803	711.2	800	965.2	28	54.0	2"	13
30	1130	114.3	139.7	248	862	762.0	857	1022.4	28	54.0	2"	13
32	1195	117.5	147.7	26	918	812.8	914	1079.5	28	54.0	2 1/4"	13
34	1245	120.7	154.0	270	973	868.8	965	1130.3	28	54.0	2 1/4"	14
36	1315	123.9	162.0	283	1032	914.4	1022	1193.8	28	66.7	2 1/4"	14
38	1270	152.4	155.0	254	1022	965.2	1054	1162.0	28	60.3	2 1/4"	14
40	1320	158.8	162.0	264	1073	1016.0	1111	1212.8	32	60.3	2 1/4"	14
42	1405	168.3	171.5	279	1127	1066.8	1168	1282.7	28	66.7	2 1/4"	14
44	1455	173.1	177.8	289	1181	1117.6	1226	1333.5	32	66.7	2 1/4"	14
46	1510	179.4	185.8	300	1235	1168.4	1276	1390.6	32	66.7	2 1/4"	14
48	1595	189.0	195.3	316	1289	1219.2	1334	1460.5	32	73.0	2 1/4"	14
50	1670	196.9	203.2	329	1343	1270.0	1384	1524.0	28	79.4	3"	14
52	1720	203.2	209.6	337	1394	1320.8	1435	1574.8	32	79.4	3"	14
54	1780	209.6	217.5	349	1448	1371.6	1492	1632.0	32	79.4	3"	14
56	1855	217.5	225.5	362	1502	1422.4	1543	1695.4	32	75.8	3 1/4"	16
58	1905	222.3	231.87	370	1553	1473.2	1600	1746.2	32	75.8	3 1/4"	16
60	1995	233.4	242.9	389	1610	1524.0	1657	1822.4	28	92.1	3 1/4"	17



## Dimensions of Class 75 Series B Flanges

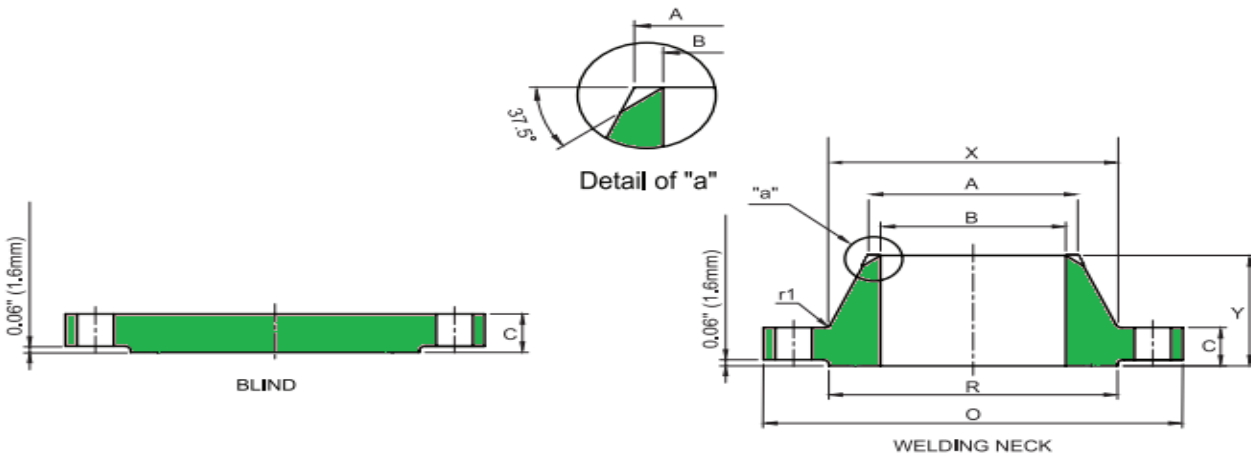
ASME B 16.47- 2011



Nominal Pipe Size NPS	Outside Dia. Of Flange O	Minimum Thickness Of Flange, C		Length Through hub Y	Diam. Of Hub X	Hub Diam. Top A	Raised Face Diam R	Drilling			Minimum Fillet Radius, r1	
		WN	BLIND					Diam. Of Bolt Circle	No. of Bolt Holes	Diam. of bolt Hole, mm		
26	760	31.9	31.9	57	676	661.9	705	723.9	36	19.05	5/8"	8
28	815	31.9	31.9	60	727	721.7	756	774.7	40	19.05	5/8"	8
30	865	31.9	31.9	64	778	763.5	806	825.5	44	19.05	5/8"	8
32	915	33.5	35.0	68	829	814.3	857	876.3	48	19.05	5/8"	8
34	965	33.5	36.6	72	879	865.1	908	927.1	52	19.05	5/8"	8
36	1035	35.0	40.9	84	935	915.9	965	992.2	40	22.2	3/4"	10
38	1085	36.6	43.0	87	986	966.7	1016	1043.0	40	22.2	3/4"	10
40	1135	36.6	43.0	91	1037	1017.5	1067	1093.8	44	22.2	3/4"	10
42	1185	38.2	46.3	94	1087	1068.3	1118	1144.6	48	22.2	3/4"	10
44	1250	41.4	47.7	103	1140	1119.1	1175	1203.3	36	50.8	7/8"	10
46	1300	43.0	49.3	106	1191	1169.9	1226	1254.1	40	50.8	7/8"	10
48	1355	44.6	52.5	110	1241	1220.7	1276	1304.9	44	50.8	7/8"	10
50	1405	46.2	54.1	114	1294	1271.7	1327	1355.7	44	50.8	7/8"	10
52	1455	46.2	55.7	119	1345	1322.3	1378	1409.7	48	50.8	7/8"	10
54	1510	47.8	58.9	124	1397	1373.1	1429	1460.5	48	50.8	7/8"	10
56	1575	49.3	60.4	133	1451	1423.9	1486	1520.8	40	28.6	1"	11
58	1625	50.9	62.0	137	1502	1474.7	1537	1571.6	44	28.6	1"	11
60	1675	54.1	65.2	143	1553	1525.5	1588	1622.4	44	28.6	1"	11

# Dimension of Class 150 Series B Flanges

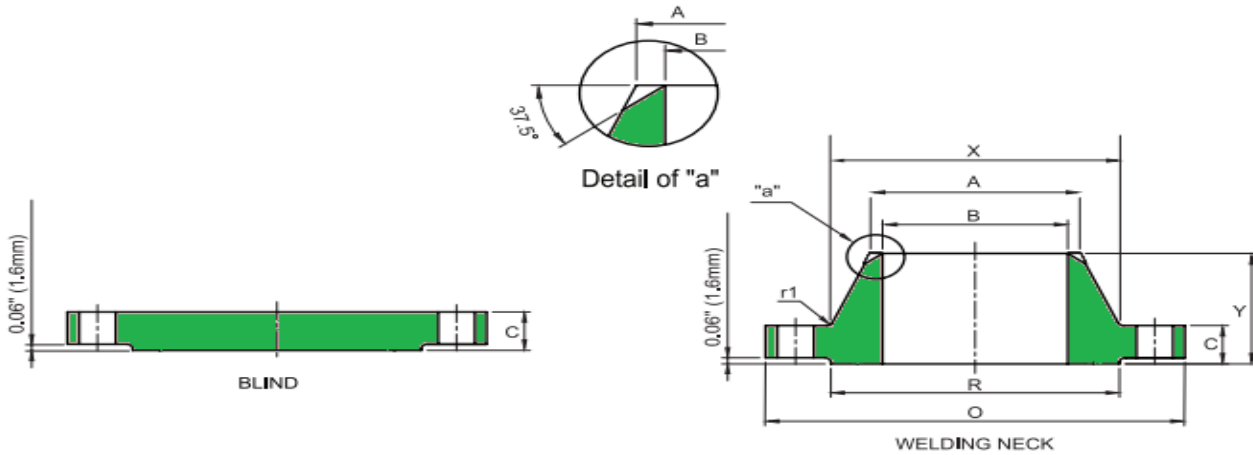
ASME B 16.47- 2011



Nominal Pipe Size NPS	Outside Dia. Of Flange O	Minimum Thickness Of Flange, C		Length Through hub Y	Diam. Of Hub X	Hub Diam. Top A	Raised Face Diam R	Drilling			Diam. Of Bolt, in	Minimum Fillet Radius, r1
		WN	BLIND					Diam. Of Bolt Circle	No. of Bolt Holes	Diam. of bolt Hole, mm		
26	785	39.8	43.0	87	684	661.9	711	744.5	36	22.2	3/4"	10
28	835	43.0	46.2	94	735	712.7	762	795.3	40	22.2	3/4"	10
30	885	43.0	49.3	98	787	763.5	813	846.1	44	22.2	3/4"	10
32	940	44.6	52.5	106	840	814.3	864	900.1	48	22.2	3/4"	10
34	1005	47.7	55.7	109	892	865.1	921	957.3	40	25.4	7/8"	10
36	1055	50.9	57.3	116	945	915.9	972	1009.6	44	25.4	7/8"	10
38	1125	52.5	62.0	122	997	968.2	1022	1070.0	40	28.6	1"	10
40	1175	54.1	65.2	127	1049	1019.0	1080	1120.8	44	28.6	1"	10
42	1225	57.3	66.8	132	1102	1069.8	1130	1171.6	48	28.6	1"	11
44	1275	58.9	70.0	135	1153	1120.6	1181	1222.4	52	28.6	1"	11
46	1340	60.4	73.1	143	1205	1171.4	1235	1284.3	40	31.8	1 1/8"	11
48	1390	63.6	76.3	148	1257	1222.2	1289	1335.1	44	31.8	1 1/8"	11
50	1445	66.8	79.5	152	1308	1273.0	1340	1385.9	48	31.8	1 1/8"	11
52	1495	68.4	82.7	156	1360	1323.6	1391	1436.7	52	31.8	1 1/8"	11
54	1550	70.0	85.8	160	1413	1374.6	1441	1492.2	56	31.8	1 1/8"	11
56	1600	71.6	89.0	165	1465	1425.4	1492	1543.0	60	31.8	1 1/8"	14
58	1675	73.1	91.9	173	1516	1476.2	1543	1611.3	48	34.9	1 1/4"	14
60	1725	74.7	95.4	178	1570	1527.0	1600	1662.1	52	34.9	1 1/4"	14

# Dimension of Class 300 Series B Flanges

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Nominal Pipe Size NPS	Outside Dia. Of Flange O	Minimum Thickness Of Flange, C		Length Through hub Y	Diam. Of Hub X	Hub Diam. Top A	Raised Face Diam R	Drilling			Diam. Of Bolt, in	Minimum Fillet Radius, r1
		WN	BLIND					Diam. Of Bolt Circle	No. of Bolt Holes	Diam. of bolt Hole, mm		
26	865	87.4	87.4	143	702	665.2	737	803.3	32	34.9	1 ¼"	14
28	92	87.4	87.4	148	756	716.0	787	857.2	36	34.9	1 ¼"	14
30	990	92.1	92.1	156	813	768.4	845	920.8	36	38.1	1 3/8"	14
32	1055	101.6	101.6	167	864	819.2	902	977.9	32	41.3	1 ½"	16
34	1110	101.6	101.6	171	918	870.0	953	1031.9	36	41.3	1 ½"	16
36	1170	101.6	101.6	179	965	920.8	1010	1089.0	32	44.5	1 5/8"	16
38	1220	109.6	109.6	191	1016	971.6	1060	1139.8	36	44.5	1 5/8"	16
40	1275	114.3	114.3	197	1067	1022.4	1114	1190.6	40	44.5	1 5/8"	16
42	1335	117.5	117.5	203	1118	1074.7	1168	1244.6	36	47.6	1 ¾"	16
44	1385	125.5	125.5	213	1173	1125.5	1219	1295.4	40	47.6	1 ¾"	16
46	1460	127.0	128.6	221	1229	1176.3	1270	1365.2	36	50.8	1 7/8"	16
48	1510	127.0	133.4	222	1278	1227.1	1327	1416.0	40	50.8	1 7/8"	16
50	1560	136.6	138.2	233	1330	1277.9	1378	1466.8	44	50.8	1 7/8"	16
52	1615	141.3	142.6	241	1383	1328.7	1429	1517.6	48	50.8	1 7/8"	16
54	1675	135.0	147.7	238	1435	1379.5	1480	1578.0	48	50.8	1 7/8"	16
56	1765	152.4	155.4	267	1494	1430.3	1537	1651.0	36	60.3	2 ¼"	17
58	1825	152.4	160.4	273	1548	1481.1	1594	1712.9	40	60.3	2 ¼"	17
60	1880	149.3	165.1	270	1599	1531.9	1651	1763.7	40	60.3	2 ¼"	17





