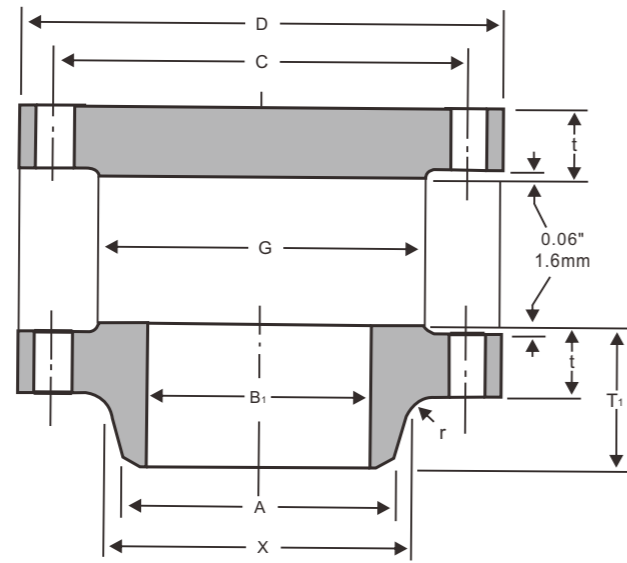


CLASS 150 FLANGE



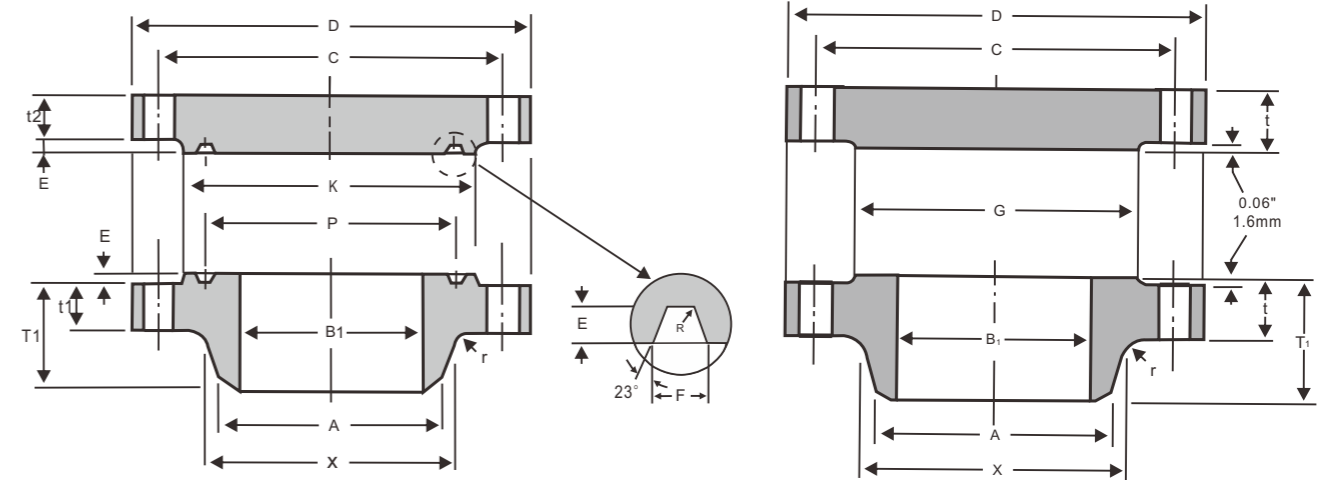
ANSI/ASME B16.47 SERIES A FLANGE

Unit:mm

Nominal Pipe Size	Outside Diam. D	O.D. of Raised Face G	Diam. at Base of Hub X	Thickness t	BORE				
					Wall Thickness				
					9.5mm	12.7mm			
					B1		Length thru Hub T1	Diam. of Hub at Bevel A	Radius of Fillet r
12	483	381.0	365.3	31.8	304.8	298.5			
14	533	412.8	400.1	35.1	336.6	330.2			
16	597	469.9	457.2	36.6	387.4	381.0			
18	635	533.4	505.0	39.6	438.2	431.8			
20	699	584.2	558.8	42.9	489.0	482.6			
22	749	641.4	609.6	46.0	539.8	533.4			
24	813	692.2	663.4	47.8	590.6	584.2			
26	870	749.3	676.1	68.3	641.4	635.0			
28	927	800.1	726.9	71.4	692.2	685.8			
30	984	857.3	781.1	74.7	743.0	736.6			
32	1060	914.4	831.9	81.0	793.8	787.4			
34	1111	965.2	882.7	82.6	844.6	838.2			
36	1168	1022.4	933.5	90.4	895.4	889.0			
38	1238	1073.2	990.6	87.4	946.2	939.8			
40	1289	1124.0	1041.4	90.4	997.0	990.6			
42	1346	1193.8	1092.2	96.8	1047.8	1041.4			
44	1403	1244.6	1143.0	101.6	1098.6	1092.2			
46	1454	1295.4	1196.8	103.1	1149.4	1143.0			
48	1511	1358.9	1247.6	108.0	1200.2	1193.8			
50	1568	1409.7	1301.8	111.3	1251.0	1244.6			
52	1626	1460.5	1352.6	115.8	1301.8	1295.4			
54	1683	1511.3	1403.4	120.7	1352.6	1346.2			
56	1746	1574.8	1457.5	124.0	1403.4	1397.0			
58	1803	1625.6	1508.3	128.5	1454.2	1447.8			
60	1854	1676.4	1559.1	131.8	1505.0	1498.6			

- Notes:
 (1) For the Bore (B1) other than wall thickness 0.375"(9.5mm) and 0.500"(127mm), refer to page 71.
 (2) Class 150 flanges will be furnished with 0.06"(1.6mm) raised face, which is included in Thickness (t) and Length through Hub (T).
 (3) Dimensional tolerances are in accordance with ANSI B16.5

CLASS 300 FLANGE



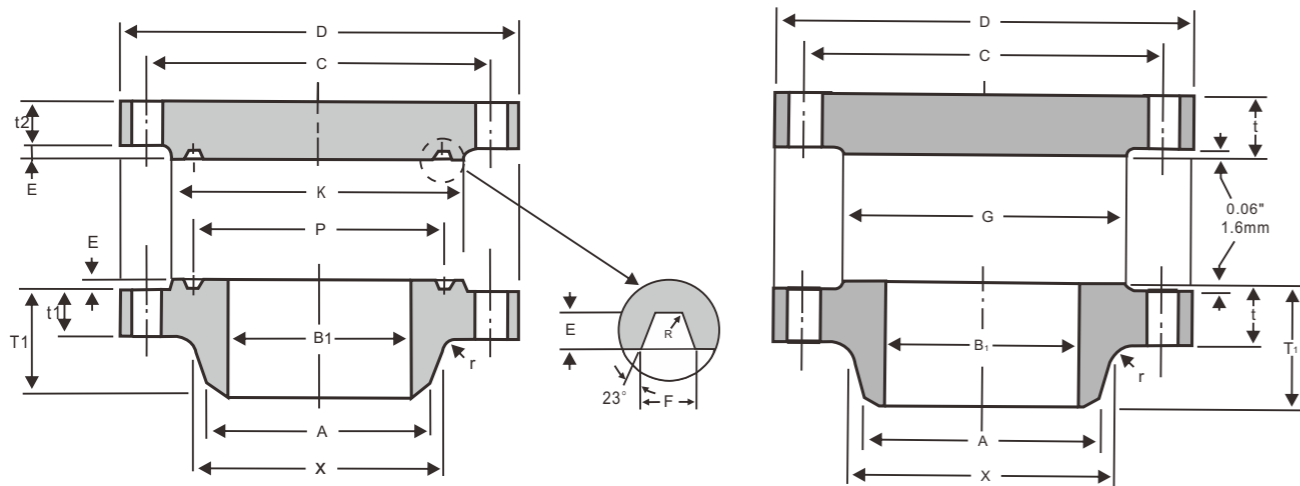
ANSI/ASME B16.47 SERIES A FLANGE

Unit:mm

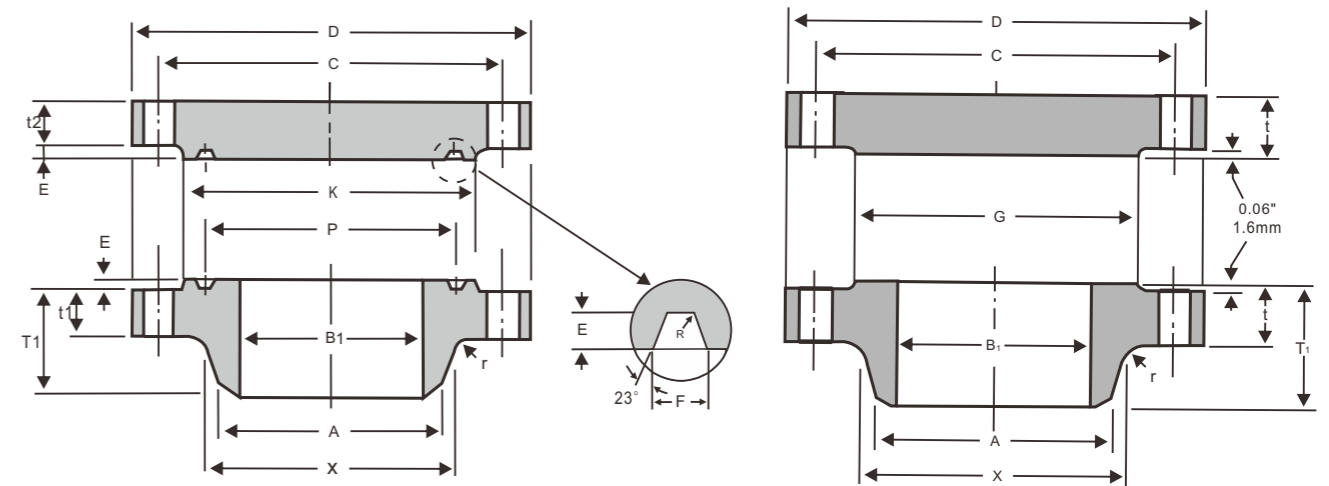
Nominal Pipe Size	Outside Diam. D	O.D. of Raised Face G	Diam. at Base of Hub X	Thickness		BORE		Length thru Hub T1	Diam. of Hub at Bevel A	Radius of Fillet r
				Welding Neck t1	Blind t2	Wall Thickness				
						9.5mm	12.7mm			
					B1		T1	A	r	
12	521	381.0	374.7	50.8	50.8	304.8	298.5	130.0	323.9	9.7
14	584	412.8	425.5	53.8	53.8	336.6	330.2	142.7	355.6	9.7
16	648	469.9	482.6	57.2	57.2	387.4	381.0	146.1	406.4	9.7
18	711	533.4	533.4	60.5	60.5	438.2	431.8	158.8	457.2	9.7
20	775	584.2	587.2	63.5	63.5	489.0	482.6	162.1	508.0	9.7
22	838	641.4	641.4	66.5	66.5	539.8	533.4	165.1	558.8	9.7
24	914	692.2	701.5	69.9	69.9	590.6	584.2	168.1	609.6	9.7
26	972	749.3	720.9	79.2	84.1	641.4	635.0	184.2	660.4	9.7
28	1035	800.1	774.7	85.9	90.4	692.2	685.8	196.9	711.2	11.2
30	1092	857.3	827.0	91.9	95.3	743.0	736.6	209.6	762.0	11.2
32	1149	914.4	881.1	98.6	100.1	793.8	787.4	222.3	812.8	11.2
34	1207	965.2	936.8	101.6	104.6	844.6	838.2	231.6	863.6	12.7
36	1270	1022.4	990.6	104.6	111.3	895.4	889.0	241.3	914.4	12.7
38	1168	1028.7	993.6	108.0	108.0	946.2	939.8	180.8	965.2	12.7
40	1238	1085.9	1047.8	114.3	114.3	997.0	990.6	193.5	1016.0	12.7
42	1289	1136.7	1098.6	119.1	119.1	1047.8	1041.4	200.2	1066.8	12.7
44	1353	1193.8	1149.4	124.0	124.0	1098.6	1092.2	206.2	1117.6	12.7
46	1416	1244.6	1203.5	128.5	128.5	1149.4	1143.0	215.9	1168.4	12.7
48	1467	1301.8	1254.3	133.4	133.4	1200.2	1193.8	223.8	1219.2	12.7
50	1530	1358.9	1305.1	139.7	139.7	1251.0	1244.6	231.6	1270.0	12.7
52	1581	1409.7	1355.9	144.5	144.5	1301.8	1295.4	238.3	1320.8	12.7
54	1657	1466.9	1409.7	152.4	152.4	1352.6	1346.2	252.5	1371.6	12.7
56	1708	1517.7	1463.5	153.9	153.9	1403.4	1397.0	260.4	1422.4	12.7
58	1759	1574.8	1514.3	158.8	158.8	1454.2	1447.8	266.7	1473.2	12.7
60	1810	1625.6	1565.1	163.6	163.6	1505.0	1498.6	273.1	1524.0	12.7

- Notes:
 (1) For the Bore (B1) other than wall thickness 0.375"(9.5mm) and 0.500"(127mm), refer to page 71.
 (2) Class 300 flanges will be furnished with 0.06"(1.6mm) raised face, which is included in Thickness (t) and Length through Hub (T).
 (3) Dimensional tolerances are in accordance with ANSI B16.5

CLASS 400 FLANGE



CLASS 600 FLANGE



ANSI/ASME B16.47 SERIES A FLANGE

Unit:mm

Nominal Pipe Size	Outside Diam. D	O.D. of Raised Face G	Diam. at Base of Hub X	Thickness		BORE		Length thru Hub T1	Diam. of Hub at Bevel A	Radius of Fillet r
				Welding Neck t1	Blind t2	Wall Thickness				
						9.5mm B1	12.7mm B1			
12	521	381.0	374.7	57.2	57.2	304.8	298.5	136.7	323.9	11.2
14	584	412.8	425.5	60.5	60.5	336.6	330.2	149.4	355.6	11.2
16	648	469.9	482.6	63.5	63.5	387.4	381.0	152.4	406.4	11.2
18	711	533.4	533.4	66.5	66.5	438.2	431.8	165.1	457.2	11.2
20	775	584.2	587.2	69.9	69.9	489.0	482.6	168.1	508.0	11.2
22	838	641.4	641.4	73.2	73.2	539.8	533.4	171.5	558.8	11.2
24	914	692.2	701.5	76.2	76.2	590.6	584.2	174.8	609.6	11.2
26	972	749.3	726.9	88.9	98.6	641.4	635.0	193.5	660.4	11.2
28	1035	800.1	782.6	95.3	104.6	692.2	685.8	206.2	711.2	12.7
30	1092	857.3	836.7	101.6	111.3	743.0	736.6	218.9	762.0	12.7
32	1149	914.4	889.0	108.0	115.8	793.8	787.4	231.6	812.8	12.7
34	1207	965.2	944.6	111.3	122.2	844.6	838.2	241.3	863.6	14.2
36	1270	1022.4	1000.3	114.3	128.5	895.4	889.0	251.0	914.4	14.2
38	1207	1035.1	1003.3	124.0	124.0	946.2	939.8	206.2	965.2	14.2
40	1270	1092.2	1054.1	130.0	130.0	997.0	990.6	215.9	1016.0	14.2
42	1321	1143.0	1107.9	133.4	133.4	1047.8	1041.4	223.8	1066.8	14.2
44	1384	1200.2	1158.7	139.7	139.7	1098.6	1092.2	233.4	1117.6	14.2
46	1441	1257.3	1212.9	146.1	146.1	1149.4	1143.0	244.3	1168.4	14.2
48	1511	1308.1	1267.0	152.4	152.4	1200.2	1193.8	257.0	1219.2	14.2
50	1568	1361.9	1320.8	157.2	158.8	1251.0	1244.6	268.2	1270.0	14.2
52	1619	1412.7	1371.6	162.1	163.6	1301.8	1295.4	276.4	1320.8	14.2
54	1702	1470.2	1425.4	169.9	171.5	1352.6	1346.2	289.1	1371.6	14.2
56	1753	1527.0	1479.6	174.8	176.3	1403.4	1397.0	298.5	1422.4	14.2
58	1803	1577.8	1530.4	177.8	180.8	1454.2	1447.8	306.3	1473.2	14.2
60	1886	1635.3	1584.5	185.7	189.0	1505.0	1498.6	319.0	1524.0	14.2

Notes:

- (1) For the Bore'(B1) other than wall thickness 0.375"(9.5mm) and 0.500"(127mm), refer to page 71.
- (2) Class 400 flanges will be furnished with 0.25"(6.4mm) raised face, which is included in Thickness'(t) and Length through Hub'(T)
- (3) Dimensional tolerances are in accordance with ANSI B16.5

ANSI/ASME B16.47 SERIES A FLANGES

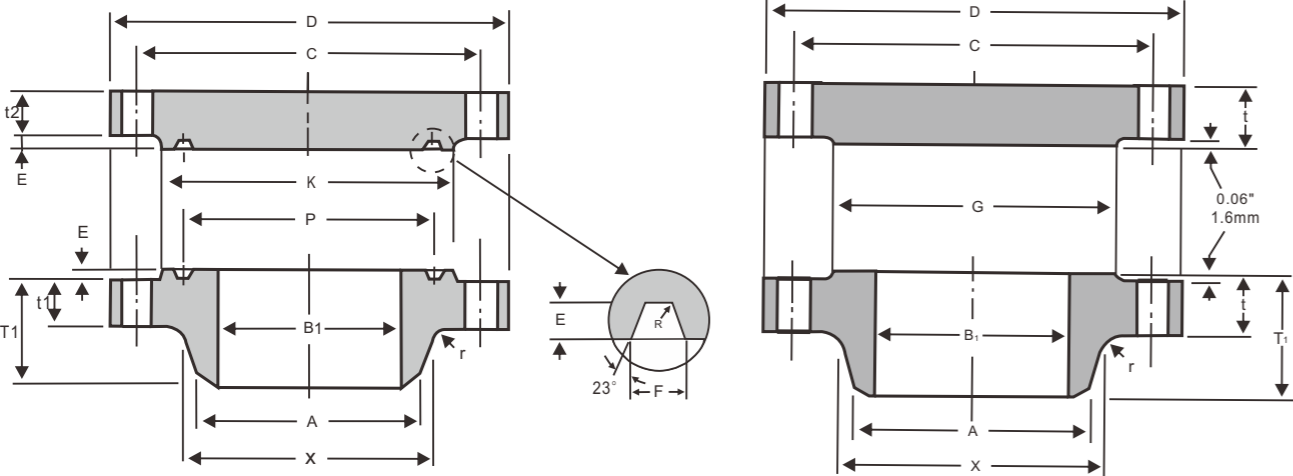
Unit:mm

Nominal Pipe Size	Outside Diam. D	O.D. of Raised Face G	Diam. at Base of Hub X	Thickness		BORE		Length thru Hub T1	Diam. of Hub at Bevel A	Radius of Fillet r
				Welding Neck t1	Blind t2	Wall Thickness				
						9.5mm B1	12.7mm B1			
12	559	381.0	400.1	66.5	66.5	304.8	298.5	155.4	323.9	11.2
14	603	412.8	431.8	69.9	69.9	336.6	330.2	165.1	355.6	11.2
16	686	469.9	495.3	76.2	76.2	387.4	381.0	177.8	406.4	11.2
18	743	533.4	546.1	82.6	82.6	438.2	431.8	184.2	457.2	11.2
20	813	584.2	609.6	88.9	88.9	489.0	482.6	190.5	508.0	11.2
22	870	641.4	666.8	95.3	95.3	539.8	533.4	196.9	558.8	11.2
24	940	692.2	717.6	101.6	101.6	590.6	584.2	203.2	609.6	11.2
26	1016	749.3	747.8	108.0	125.5	641.4	635.0	222.3	660.4	12.7
28	1073	800.1	803.1	111.3	131.8	692.2	685.8	235.0	711.2	12.7
30	1130	857.3	862.1	114.3	139.7	743.0	736.6	247.7	762.0	12.7
32	1194	914.4	917.4	117.3	147.6	793.8	787.4	260.4	812.8	12.7
34	1245	965.2	973.1	120.7	153.9	844.6	838.2	269.7	863.6	14.2
36	1314	1022.4	1031.7	124.0	162.1	895.4	889.0	282.4	914.3	14.2
38	1270	1054.1	1022.4	152.4	155.4	946.2	939.8	254.0	965.2	14.2
40	1321	1111.3	1073.2	158.8	162.1	997.0	990.6	263.7	1016.0	14.2
42	1403	1168.4	1127.3	168.1	171.5	1047.8	1041.4	279.4	1066.8	14.2
44	1454	1225.6	1181.1	173.0	177.8	1098.6	1092.2	289.1	1117.6	14.2
46	1511	1276.4	1234.9	179.3	185.7	1149.4	1143.0	300.0	1168.4	14.2
48	1594	1333.5	1289.1	189.0	195.3	1200.2	1193.8	316.0	1219.2	14.2
50	1670	1384.3	1343.2	196.9	203.2	1251.0	1244.6	328.7	1270.0	14.2
52	1721	1435.1	1394.0	203.2	209.6	1301.8	1295.4	336.6	1320.8	14.2
54	1778	1492.3	1447.8	209.6	217.4	1352.6	1346.2	349.3	1371.6	14.2
56	1854	1543.1	1501.9	217.4	225.6	1403.4	1397.0	362.0	1422.4	15.7
58	1905	1600.2	1552.4	222.3	231.6	1454.2	1447.8	369.8	1473.2	15.7
60	1994	1657.4	1609.9	233.4	242.8	1505.0	1498.6	388.9	1524.0	17.5

Notes:

- (1) For the Bore'(B1) other than wall thickness 0.375"(9.5mm) and 0.500"(127mm), refer to page 71.
- (2) Class 400 flanges will be furnished with 0.25"(6.35mm) raised face, which is included in Thickness'(t) and Length through Hub'(T)
- (3) Dimensional tolerances are in accordance with ANSI B16.5

CLASS 900 FLANGE



ANSI/ASME B16.47 SERIES A FLANGE

Unit:mm

Nominal Pipe Size	Outside Diam. D	O.D.of Raised Face G	Diam. at Base of Hub X	Thickness		BORE		Length thru Hub T1	Diam. of Hub at Bevel A	Radius of Fillet r
				Welding Neck t1	Blind t2	Wall Thickness				
						9.5mm	12.7mm			
						B1				
12	610	381.0	419.1	79.2	79.2	304.8	298.5	200.2	323.9	11.2
14	641	412.8	450.9	85.9	85.9	336.6	330.2	212.9	355.6	11.2
16	705	469.9	508.0	88.9	88.9	387.4	381.0	215.9	406.4	11.2
18	787	533.4	565.2	101.6	101.6	438.2	431.8	228.6	457.2	11.2
20	857	584.2	622.3	108.0	108.0	489.0	482.6	247.7	508.0	11.2
24	1041	692.2	749.3	139.7	139.7	590.6	584.2	292.1	609.6	11.2
26	1086	749.3	774.7	139.7	160.3	641.4	635.0	285.8	660.4	11.2
28	1168	800.1	831.9	142.7	171.5	692.2	685.8	298.5	711.2	12.7
30	1232	857.3	889.0	149.4	182.4	743.0	736.6	311.2	762.6	12.7
32	1314	914.4	946.2	158.8	193.5	793.8	787.4	330.2	812.8	12.7
34	1397	965.2	1006.3	165.1	204.7	844.6	838.2	349.3	863.6	14.2
36	1461	1022.4	1063.8	171.5	214.4	895.4	889.0	362.0	914.4	14.2
38	1461	1098.6	1073.2	190.5	215.9	946.2	939.8	352.6	965.2	19.1
40	1511	1162.1	1127.3	196.9	223.8	997.0	990.6	363.5	1016.0	20.6
42	1562	1212.9	1176.3	206.2	231.6	1047.8	1041.4	371.3	1066.8	20.6
44	1648	1270.0	1234.9	214.4	242.8	1198.6	1092.2	390.7	1117.6	22.4
46	1734	1333.5	1292.4	225.6	255.5	1149.4	1143.0	411.0	1168.4	22.4
48	1784	1384.3	1343.2	233.4	263.7	1200.2	1193.8	419.1	1219.2	23.9

Notes:
 (1) For the Bore (B1) other than wall thickness 0.375"(9.5mm) and 0.500"(127mm), refer to page 71.
 (2) Class 400 flanges will be furnished with 0.25"(6.35mm) raised face, which is included in Thickness (t) and Length through Hub (T).
 (3) Dimensional tolerances are in accordance with ANSI B16.5