

Non-metallic Gaskets

Standard Dimension Table For ASME B16.5 Flanges

**FLAT RING GASKET DIMENSIONS TO ASME B16.21:2016
USED WITH ASME/ANSI B16.5 RAISED FACE FLANGES**

NOMINAL SIZE		ID	OD				
DN mm	NPS in.		150 lbs	300 lbs	400 lbs	600 lbs	900 lbs
15	½	21	48	54	54	54	64
20	¾	27	57	67	67	67	70
25	1	33	67	73	73	73	79
32	1¼	42	76	83	83	83	89
40	1½	48	86	95	95	95	98
50	2	60	105	111	111	111	143
65	2½	73	124	130	130	130	165
80	3	89	137	149	149	149	168
90	3½	102	162	165	162	162	-
100	4	114	175	181	178	194	206
125	5	141	197	216	213	241	248
150	6	168	222	251	248	267	289
200	8	219	279	308	305	321	359
250	10	273	340	362	359	400	435
300	12	324	410	422	419	457	498
350	14	356	451	486	483	492	521
400	16	406	514	540	537	565	575
450	18	457	549	597	594	613	638
500	20	508	606	654	648	683	699
600	24	610	718	775	768	791	838

■ = For information only

Dimensions are in millimeters (mm)

**FLAT RING GASKET DIMENSIONS TO ASME B16.21:2016
USED WITH ASME B16.47 SERIES-A RAISED FACE FLANGES**

NOMINAL SIZE		ID	OD			
DN mm	NPS in.		150 lbs	300 lbs	400 lbs	600 lbs
550 ¹⁾	22 ¹⁾	559	660	705	702	733
650	26	660	775	835	832	867
700	28	711	832	899	892	914
750	30	762	883	953	946	972
800	32	813	940	1006	1003	1022
850	34	864	991	1057	1054	1073
900	36	914	1048	1118	1118	1130
950	38	965	1111	1054	1073	1105
1000	40	1016	1162	1114	1127	1156
1050	42	1067	1219	1165	1178	1219
1100	44	1118	1276	1219	1232	1270
1150	46	1168	1327	1273	1289	1327
1200	48	1219	1384	1324	1346	1391
1250	50	1270	1435	1378	1403	1448
1300	52	1321	1492	1429	1454	1499
1350	54	1372	1549	1492	1518	1556
1400	56	1422	1607	1543	1568	1613
1450	58	1473	1664	1594	1619	1664
1500	60	1524	1715	1645	1683	1721

Dimensions are in millimeters (mm)

NOTE:

1) NPS 22 for reference only. Size not listed in ASME B16.47

■ = For information only

**FLAT RING GASKET DIMENSIONS TO ASME B16.21:2016
USED WITH ASME B16.47 SERIES-B RAISED FACE FLANGES**

NOMINAL SIZE		ID	OD				
DN mm	NPS in.		75 lbs	150 lbs	300 lbs	400 lbs	600 lbs
650	26	660	708	725	772	746	765
700	28	711	759	776	826	800	819
750	30	762	810	827	886	857	879
800	32	813	860	881	940	911	933
850	34	864	911	935	994	962	997
900	36	914	973	987	1048	1022	1048
950	38	965	1024	1045	1099	-	-
1000	40	1016	1075	1095	1149	-	-
1050	42	1067	1126	1146	1200	-	-
1100	44	1118	1181	1197	1251	-	-
1150	46	1168	1232	1256	1318	-	-
1200	48	1219	1283	1307	1368	-	-
1250	50	1270	1334	1357	1419	-	-
1300	52	1321	1387	1408	1470	-	-
1350	54	1372	1438	1464	1530	-	-
1400	56	1422	1495	1514	1594	-	-
1450	58	1473	1546	1580	1656	-	-
1500	60	1524	1597	1630	1705	-	-

■ = For information only

Dimensions are in millimeters (mm)

**FULL FACE GASKET DIMENSIONS TO ASME B16.21:2016
USED WITH ASME/ANSI B16.5 FLAT FACE FLANGES**

NOMINAL SIZE		ID	150 lbs				* 300 lbs			
DN mm	NPS in.		OD	BCD	HOLE DIA.	No. of bolt holes	OD	BCD	HOLE DIA.	No. of bolt
15	½	21	89	60.3	15.9	4	95	67	16	4
20	¾	27	98	69.9	15.9	4	117	83	19	4
25	1	33	108	79.4	15.9	4	123	89	19	4
32	1¼	42	117	88.9	15.9	4	133	98	19	4
40	1½	48	127	98.4	15.9	4	155	114	22	4
50	2	60	152	120.7	19.1	4	165	127	19	8
65	2½	73	178	139.7	19.1	4	190	149	22	8
80	3	89	191	152.4	19.1	4	209	168	22	8
90	3½	102	216	177.8	19.1	8	228	184	22	8
100	4	114	229	190.5	19.1	8	254	200	22	8
125	5	141	254	215.9	22.3	8	279	235	22	8
150	6	168	279	241.3	22.3	8	317	270	22	12
200	8	219	343	298.5	22.3	8	381	330	25	12
250	10	273	406	362.0	25.4	12	444	387	29	16
300	12	324	483	431.8	25.4	12	520	451	32	16
350	14	356	533	476.3	28.6	12	584	514	32	20
400	16	406	597	539.8	28.6	16	647	572	35	20
450	18	457	635	577.9	31.8	16	711	629	35	24
500	20	508	699	635.0	31.8	20	774	686	35	24
600	24	610	813	749.3	34.9	20	914	813	41	24

■ = For information only

Dimensions are in millimeters (mm)

* OGF INTERNAL MANUFACTURING SPECIFICATIONS

Non-metallic Gaskets

Standard Dimension Table for ASME & BSEN Flanges

**FULL FACE GASKET DIMENSION FOR ASME B16.47:2016 SERIES-A
FLAT FACE FLANGES**

NOMINAL SIZE		*150 lbs						*300 lbs				
DN mm	NPS in.	ID	OD	BCD	HOLE DIA.	No. of bolt holes	ID	OD	BCD	HOLE DIA.	No. of bolt holes	
550	22	558.8	749	692	35	20	558.8	838	743	41	24	
650	26	660.4	870	806.4	35.0	24	660.4	970	876.3	44.5	28	
700	28	711.2	925	863.6	35.0	28	711.2	1035	939.8	44.5	28	
750	30	762.0	985	914.4	35.0	28	762.0	1090	997.0	47.6	28	
800	32	812.8	1060	977.9	41.3	28	812.8	1150	1054.1	50.8	28	
850	34	863.6	1110	1028.7	41.3	32	863.6	1205	1104.9	50.8	28	
900	36	914.4	1170	1085.8	41.3	32	914.4	1270	1168.4	54.0	32	
950	38	965.2	1240	1149.4	41.3	32	965.2	1170	1092.2	41.3	32	
1000	40	1016.0	1290	1200.2	41.3	36	1016.0	1240	1155.7	44.5	32	
1050	42	1066.8	1345	1257.3	41.3	36	1066.8	1290	1206.5	44.5	32	
1100	44	1117.6	1405	1314.4	41.3	40	1117.6	1355	1263.6	47.6	32	
1150	46	1168.4	1455	1365.2	41.3	40	1168.4	1415	1320.8	50.8	28	
1200	48	1219.2	1510	1422.4	41.3	44	1219.2	1465	1371.6	50.8	32	
1250	50	1270.0	1570	1479.6	47.6	44	1270.0	1530	1428.8	54.0	32	
1300	52	1320.8	1625	1536.7	47.6	44	1320.8	1580	1479.6	54.0	32	
1350	54	1371.6	1685	1593.8	47.6	44	1371.6	1660	1549.4	60.3	28	
1400	56	1422.4	1745	1651.0	47.6	48	1422.4	1710	1600.2	60.3	28	
1450	58	1473.2	1805	1708.2	47.6	48	1473.2	1760	1651.0	60.3	32	
1500	60	1524.0	1855	1759.0	47.6	52	1524.0	1810	1701.8	60.3	32	

= For information only Dimensions are in millimeters (mm)
* OGF MANUFACTURING SPECIFICATIONS (FULL FACE GASKET DIMENSIONS NOT MENTIONED IN ASME B16.21:2016)

**FULL FACE GASKET DIMENSION FOR ASME B16.47:2016 SERIES-B
FLAT FACE FLANGES**

NOMINAL SIZE		*150 lbs						*300 lbs					
DN mm	NPS in.	ID	OD	BCD	HOLE DIA.	No. of bolt holes	ID	OD	BCD	HOLE DIA.	No. of bolt holes		
650	26	661.9	785	744.5	22.3	36	665.2	865	803.3	35.0	32		
700	28	712.7	835	795.3	22.3	40	716.0	920	857.2	35.0	36		
750	30	763.5	885	846.1	22.3	44	768.4	990	920.8	38.1	36		
800	32	814.3	940	900.1	22.3	48	819.2	1055	977.9	41.3	32		
850	34	865.1	1005	957.3	25.4	40	870.0	1110	1031.9	41.3	36		
900	36	915.9	1055	1009.6	25.4	44	920.8	1170	1089.0	44.5	32		
950	38	968.2	1125	1070.0	28.6	40	971.6	1220	1139.8	44.5	36		
1000	40	1019.0	1175	1120.8	28.6	44	1022.4	1275	1190.6	44.5	40		
1050	42	1069.8	1225	1171.6	28.6	48	1074.7	1335	1244.6	47.7	36		
1100	44	1120.6	1275	1222.4	28.6	52	1125.5	1385	1295.4	47.7	40		
1150	46	1171.4	1340	1284.3	31.8	40	1176.3	1460	1365.2	50.8	36		
1200	48	1222.2	1390	1335.1	31.8	44	1227.1	1510	1416.0	50.8	40		
1250	50	1273.0	1445	1385.9	31.8	48	1277.9	1560	1466.8	50.8	44		
1300	52	1323.8	1495	1436.7	31.8	52	1328.7	1615	1517.6	50.8	48		
1350	54	1374.6	1550	1492.2	31.8	56	1379.5	1675	1578.0	50.8	48		
1400	56	1425.4	1600	1543.0	31.8	60	1430.3	1765	1651.0	60.4	36		
1450	58	1476.2	1675	1611.3	35.0	48	1481.1	1825	1712.9	60.4	40		
1500	60	1527.0	1725	1662.1	35.0	52	1557.3	1880	1763.7	60.4	40		

= For information only Dimensions are in millimeters (mm)
* OGF MANUFACTURING SPECIFICATIONS (FULL FACE GASKET DIMENSIONS NOT MENTIONED IN ASME B16.21:2016)

**FLAT RING GASKET DIMENSIONS FOR RAISED FACE FLANGES,
PN-DESIGNATED (BS EN 1514-1:1997)**

NOMINAL SIZE	DN mm	NPS in.	PN - 2.5		PN 6		PN 10		PN 16		PN 25		PN 40		PN 63	
			ID	OD	ID	OD	ID	OD	ID	OD	ID	OD	ID	OD	ID	OD
10	18	3/8	18	39	18	39	18	46	18	46	18	46	18	46	18	56
15	20	3/4	22	44	22	44	22	51	22	51	22	51	22	51	21	61
20	25	1	27	54	27	54	27	61	27	61	27	61	27	61	25	72
25	32	1 1/4	34	64	34	64	34	71	34	71	34	71	34	71	30	82
32	40	1 1/2	43	76	43	76	43	82	43	82	43	82	43	82	41	88
40	50	1 3/4	49	86	49	86	49	92	49	92	49	92	49	92	40	103
50	60	2	61	96	61	96	61	107	61	107	61	107	61	107	59	113
60	75	2 1/2	77	116	77	116	77	127	77	127	77	127	77	127	73	138
80	100	3	89	132	89	132	89	142	89	142	89	142	89	142	86	148
100	4	4	115	152	115	152	115	162	115	162	115	162	115	162	110	174
125	5	5	141	182	141	182	141	192	141	192	141	192	141	192	135	210
150	6	6	169	207	169	207	169	218	169	218	169	218	169	218	163	247
200	8	8	220	262	220	262	220	273	220	273	220	273	220	273	210	309
250	10	10	273	317	273	317	273	328	273	328	273	328	273	328	264	364
300	12	12	324	373	324	373	324	378	324	378	324	378	324	378	317	424
350	14	14	356	423	356	423	356	438	356	438	356	438	356	438	350	486
400	16	16	407	473	407	473	407	489	407	489	407	489	407	489	415	543
450	18	18	458	528	458	528	458	539	458	539	458	539	458	539	471	603
500	20	20	508	578	508	578	508	594	508	594	508	594	508	594	528	661
600	24	24	610	679	610	679	610	695	610	695	610	695	610	695	641	771
700	28	28	712	784	712	784	712	810	712	810	712	810	712	810	771	881
800	32	32	813	890	813	890	813	917	813	917	813	917	813	917	881	991
900	36	36	915	990	915	990	915	1017	915	1017	915	1017	915	1017	991	1101
1000	40	40	1016	1090	1016	1090	1016	1124	1016	1128	1016	1128	1016	1128	1091	1211
1100	44	44	1120	1231	1120	1231	1120	1231	1120	1231	1120	1231	1120	1231	1171	1331
1200	48	48	1220	1290	1220	1307	1220	1341	1220	1342	1220	1342	1220	1342	1251	1451
1400	56	56	1420	1490	1420	1524	1420	1548	1420	1542	1420	1542	1420	1542	1451	1651
1500	60	60	1520	1620	1520	1724	1520	1658	1520	1654	1520	1654	1520	1658	1551	1751
1600	64	64	1620	1700	1620	1724	1620	1724	1620	1724	1620	1724	1620	1724	1651	1851
1800	72	72	1820	1900	1820	1931	1820	1972	1820	1964	1820	1964	1820	1964	1851	2051
2000	80	80	2020	2100	2020	2138	2020	2182	2020	2168	2020	2168	2020	2168	2051	2251
2200	88	88	2220	2307	2220	2348	2220	2384	2220	2374	2220	2374	2220	2374	2151	2451
2400	96	96	2420	2507	2420	2558	2420	2594	2420	2584	2420	2584	2420	2584	2251	2651
2600	104	104	2620	2707	2620	2762	2620	2794	2620	2784	2620	2784	2620	2784	2351	2851
2800	112	112	2820	2924	2820	2972	2820	3014	2820	3004	2820	3004	2820	3004	2451	3051
3000	120	120	3020	3124	3020	3172	3020	3228	3020	3218	3020	3218	3020	3218	2551	3251
3200	128	128	3220	3324	3220	3382	3220	3438	3220	3428	3220	3428	3220	3428	2651	3451
3400	136	136	3420	3524	3420	3592	3420	3648	3420	3638	3420	3638	3420	3638	2751	3651
3600	144	144	3620	3734	3620	3804	3620	3860	3620	3850	3620	3850	3620	3850	2851	3851
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Non-metallic Gaskets

Standard Dimension Table for BSEN Flanges

FULL FACE GASKET DIMENSION FOR FLAT FACE FLANGES, PN-DESIGNATED (BS EN 1514-1:1997)

NOMINAL SIZE		ID	PN 16				PN 25				PN 40			
DN mm	NPS in.		OD ²⁾³⁾	BCD	HOLE DIA.	No. of holes	OD ²⁾³⁾	BCD	HOLE DIA.	No. of holes	OD ²⁾³⁾	BCD	HOLE DIA.	No. of holes
10		18	90	60	14	4	90	60	14	4	90	60	14	4
15	½	22	95	65	14	4	95	65	14	4	95	65	14	4
20	¾	27	105	75	14	4	105	75	14	4	105	75	14	4
25	1	34	115	85	14	4	115	85	14	4	115	85	14	4
32	1¼	43	140	100	18	4	140	100	18	4	140	100	18	4
40	1½	49	150	110	18	4	150	110	18	4	150	110	18	4
50	2	61	165	125	18	4	165	125	18	4	165	125	18	4
60 ¹⁾		72	175	135	18	8	175	135	18	8	175	135	18	8
65 ⁵⁾	2½	77	185	145	18	8	185	145	18	8	185	145	18	8 ⁵⁾
80	3	89	200	160	18	8	200	160	18	8	200	160	18	8
100	4	115	220	180	18	8	235	190	22	8	235	190	22	8
125	5	141	250	210	18	8	270	220	26	8	270	220	26	8
150	6	169	285	240	22	8	300	250	26	8	300	250	26	8
200	8	220	340	295	22	12	360	310	26	12	375	320	30	12
250	10	273	405 ⁴⁾	355	26	12	425	370	30	12	450	385	33	12
300	12	324	460 ⁴⁾	410	26	12	485	430	30	16	515	450	33	16
350	14	356	520	470	26	16	555	490	33	16	580	510	36	16
400	16	407	580	525	30	16	620	550	36	16	660	585	39	16
450	18	458	640	585	30	20	670	600	36	20	685	610	39	20
500	20	508	715	650	33	20	730	660	36	20	755	670	42	20
600	24	610	840	770	36	20	845	770	39	20	890	795	48	20
700	28	712	910	840	36	24	960	875	42	24	-	-	-	-
800	32	813	1025	950	39	24	1085	990	48	24	-	-	-	-
900	36	915	1125	1050	39	28	1185	1090	48	28	-	-	-	-
1000	40	1016	1255	1170	42	28	1320	1210	56	28	-	-	-	-
1100	44	1120	1355	1270	42	32	1420	1310	56	32	-	-	-	-
1200	48	1220	1485	1390	48	32	1530	1420	56	32	-	-	-	-
1400	56	1420	1685	1590	48	36	1755	1640	62	36	-	-	-	-
1500 ¹⁾	60	1520	1820	1710	56	36	1865	1750	62	36	-	-	-	-
1600	64	1620	1930	1820	56	40	1975	1860	62	40	-	-	-	-
1800	72	1820	2130	2020	56	44	2195	2070	70	36	-	-	-	-
2000	80	2020	2345	2230	62	48	2425	2300	70	36	-	-	-	-

NOTE: FOR PN 16 and PN 40

1) Relates to cast iron flanges only.

2) Except tongue and groove gasket.

3) See table 10 for inside diameters of gasket to suit EN 545, En 598 and En 969 flanges.

4) For ductile iron pipes and fittings complying with EN 545, En 598 and 969, the outside diameters for the following flanges are: DN 250: 400mm & DN 300: 455mm

5) This gasket is used also for flanges having 4 bolts holes.

■ = For information only

Dimensions in mm