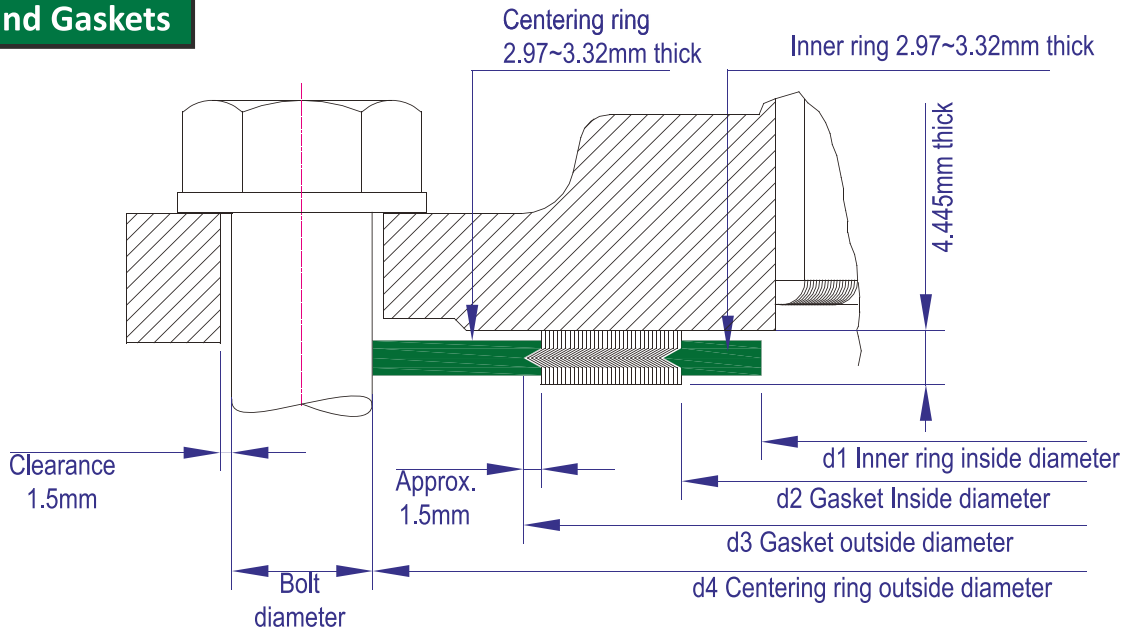
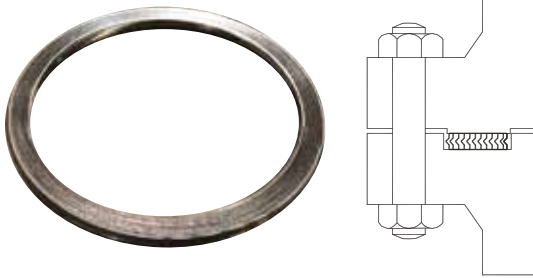


Spiral Wound Gaskets

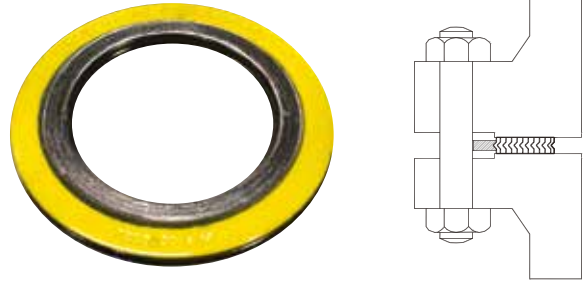


OSW1



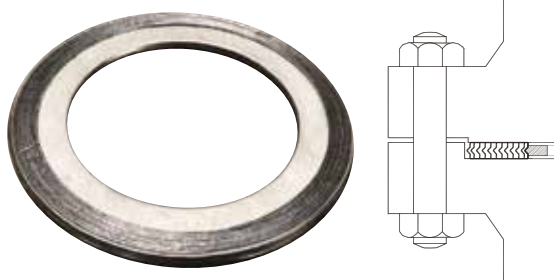
The OSW1 OGF Spiral Wound gasket has no metal ring. This style is suitable for tongue and groove face connection and sometimes for male and female face connection but not suitable for ordinary pipe flange of raised face. This style is commonly used for valve bonnet, pressure vessels, etc.

OSW3



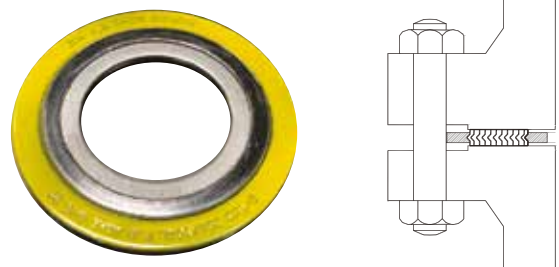
The OSW 2 OGF Spiral Wound gasket has metal inner ring. As inner ring works as reinforcement to prevent internal extrusion or inward buckling of gasket windings caused by compression, this style is suitable for male and female face connection but not suitable for ordinary pipe flange of raised face.

OSW2



The OSW 3 OGF Spiral Wound gasket is with outer metal ring. Outer ring works as 1) centering a gasket properly between the flanges, 2) limiting bolt load at proper compression, 3) preventing external expansion by compression. For PTFE filler gasket, this style is basically not recommended due to possibility of inward buckling during compression. This style is most common for ordinary pipe flange of raised face.

OSW4



The OSW4 OGF Spiral Wound gasket has both metal outer and inner ring. As inner ring works to prevent internal extrusion or inward buckling, this style is especially recommended for the following cases.

- For flanges NPS 24 and larger in class 900, NPS 12 and larger in class
- 1500 and NPS 4 and larger in class 2500#.
- PTFE filler material.- For socket welding, lapped, welding neck & integral flanges. This style is suitable for pipe or pressure vessels using raised face flange connection.

STANDARD DIMENSION TABLE

Spiral Wound Gaskets

DIMENSIONS FOR SPIRAL -WOUND GASKETS USED WITH ASME/ANSI B16.5 FLANGES ASME B16.20:2017
 All dimensions are in millimeters.

| FLANGES SIZE | | d1 | | | | | d2 | | | | | d3 | | d4 | | | | | | |
|--------------|---------|-------|-----------|--------|--------|--------|----------|-----------|--------|--------|--------|-----------|-----------|-------|-------|-------|--------|--------|--------|--------|
| DN mm | NPS in. | PN 20 | PN 68-100 | PN 150 | PN 250 | PN 420 | PN 20-50 | PN 68-100 | PN 150 | PN 250 | PN 420 | PN 20-100 | PN150 420 | PN 20 | PN 50 | PN 68 | PN 100 | PN 150 | PN 250 | PN 420 |
| 15 | 1/2 | 14.2 | 14.2 | 14.2 | 14.2 | 14.2 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | 31.8 | 31.8 | 47.8 | 54.1 | 54.1 | 54.1 | 63.5 | 63.5 | 69.9 |
| 20 | 3/4 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 25.4 | 25.4 | 25.4 | 25.4 | 25.4 | 39.6 | 39.6 | 57.2 | 66.8 | 66.8 | 66.8 | 69.9 | 69.9 | 76.2 |
| 25 | 1 | 26.9 | 26.9 | 26.9 | 26.9 | 26.9 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 47.8 | 47.8 | 66.8 | 73.2 | 73.2 | 73.2 | 79.5 | 79.5 | 85.9 |
| 32 | 1 1/4 | 38.1 | 38.1 | 33.3 | 33.3 | 33.3 | 47.8 | 47.8 | 39.6 | 39.6 | 39.6 | 60.5 | 60.5 | 76.2 | 82.6 | 82.6 | 82.6 | 88.9 | 88.9 | 104.9 |
| 40 | 1 1/2 | 44.5 | 44.5 | 41.4 | 41.4 | 41.4 | 54.1 | 54.1 | 47.8 | 47.8 | 47.8 | 69.9 | 69.9 | 85.9 | 95.3 | 95.3 | 95.3 | 98.9 | 98.9 | 117.6 |
| 50 | 2 | 55.6 | 55.6 | 52.3 | 52.3 | 52.3 | 69.9 | 69.9 | 58.7 | 58.7 | 58.7 | 85.9 | 85.9 | 104.9 | 111.3 | 111.3 | 111.3 | 143 | 143 | 146 |
| 65 | 2 1/2 | 66.5 | 66.5 | 63.5 | 63.5 | 63.5 | 82.6 | 82.6 | 69.9 | 69.9 | 69.9 | 98.6 | 98.6 | 124 | 130.3 | 130.3 | 130.3 | 165.1 | 165.1 | 168.4 |
| 80 | 3 | 81.0 | 81.0 | 78.7 | 78.7 | 78.7 | 101.6 | 101.6 | 95.3 | 92.2 | 92.2 | 120.7 | 120.7 | 136.7 | 149.4 | 149.4 | 149.4 | 168.4 | 168.4 | 196.9 |
| 90 | 3 1/2 | 93.7 | 93.7 | - | - | - | 114.3 | 104.8 | 104.8 | 104.8 | - | 133.4 | 133.4 | 161.9 | 165.1 | 161.9 | 161.9 | 190.5 | 187.3 | - |
| 100 | 4 | 106.4 | 102.6 | 102.6 | 97.8 | 97.8 | 127 | 120.7 | 120.7 | 117.6 | 117.6 | 149.4 | 149.4 | 174.8 | 181.1 | 177.8 | 193.8 | 206.5 | 209.6 | 235 |
| 125 | 5 | 131.8 | 128.3 | 128.3 | 124.5 | 124.5 | 155.7 | 147.6 | 147.6 | 143 | 143 | 177.8 | 177.8 | 196.9 | 215.9 | 212.9 | 241.3 | 247.7 | 254 | 279.4 |
| 150 | 6 | 157.2 | 154.9 | 154.9 | 147.3 | 147.3 | 182.6 | 174.8 | 174.8 | 171.5 | 171.5 | 209.6 | 209.6 | 222.3 | 251 | 247.7 | 266.7 | 289.1 | 282.7 | 317.5 |
| 200 | 8 | 215.9 | 205.7 | 196.9 | 196.9 | 196.9 | 233.4 | 225.6 | 225.6 | 215.9 | 215.9 | 263.7 | 279.4 | 279.4 | 308.1 | 304.8 | 320.8 | 358.9 | 352.6 | 387.4 |
| 250 | 10 | 268.3 | 255.3 | 246.1 | 246.1 | 246.1 | 287.3 | 274.6 | 274.6 | 266.7 | 270 | 317.5 | 311.2 | 339.9 | 362 | 358.9 | 400.1 | 435.1 | 435.1 | 476.3 |
| 300 | 12 | 317.5 | 307.3 | 292.1 | 292.1 | 292.1 | 339.9 | 327.2 | 327.2 | 323.9 | 317.5 | 374.7 | 368.3 | 409.7 | 422.4 | 419.1 | 457.2 | 498.6 | 520.7 | 549.4 |
| 350 | 14 | 349.3 | 342.9 | 320.8 | 320.8 | - | 371.6 | 362 | 355.6 | 362 | - | 406.4 | 400.1 | 450.9 | 485.9 | 482.6 | 492.3 | 520.7 | 577.9 | - |
| 400 | 16 | 400.1 | 389.9 | 374.7 | 368.3 | - | 422.4 | 412.8 | 412.8 | 406.4 | - | 463.6 | 457.2 | 514.4 | 539.8 | 536.7 | 565.2 | 574.8 | 641.4 | - |
| 450 | 18 | 449.3 | 438.2 | 425.5 | 425.5 | - | 474.7 | 469.9 | 463.6 | 463.6 | - | 527.1 | 520.7 | 549.4 | 593.9 | 593.9 | 612.9 | 638.9 | 704.9 | - |
| 500 | 20 | 500.1 | 489.0 | 482.6 | 476.3 | - | 525.5 | 520.7 | 520.7 | 514.4 | - | 577.9 | 571.5 | 606.5 | 654.1 | 647.7 | 682.8 | 698.5 | 755.7 | - |
| 600 | 24 | 603.3 | 590.6 | 590.6 | 577.9 | - | 628.7 | 628.7 | 628.7 | 616.0 | - | 685.8 | 679.5 | 717.6 | 774.7 | 768.4 | 790.7 | 838.2 | 901.7 | - |

NOTES:
 FOR INNER RING - ASME B16.20
 1) There are no: a) NPS 1/2 through NPS 3 Class 400 flanges; therefore, use Class 600 flanges.
 b) NPS 1/2 through NPS 2 1/2 Class 900 flanges; therefore, use Class 1500 flanges.
 c) NPS 14 and larger class 2500 flanges.
 2) Refer to para. 3.2.5 for required use of inner rings.
 NPS 3 1/2 in. (DN 90 mm) for reference only. Size not listed in ASME B16.20
 = For information only

DIMENSIONS FOR SPIRAL -WOUND GASKETS USED WITH ASME B16.47 SERIES 'A' FLANGES
 ASME B16.20:2017 Table SW-2.1-2 & SW-2.1-5

| FLANGES SIZE | | d1 | | | | | d2 | | | | | d3 | | | | | d4 | | | | |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| DN mm | NPS in. | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs |
| 550 | *22 | 552.5 | 552.5 | 552.5 | 552.5 | - | 577.9 | 577.9 | 577.9 | 577.9 | 616.0 | 609.6 | 628.7 | 628.7 | 628.7 | 685.8 | 660.4 | 704.8 | 701.7 | 733.4 | 838.2 |
| 650 | 26 | 654.1 | 654.1 | 660.4 | 647.7 | 660.4 | 673.1 | 685.8 | 685.8 | 685.8 | 685.8 | 704.9 | 736.6 | 736.6 | 736.6 | 736.6 | 774.7 | 835.2 | 831.9 | 866.9 | 882.7 |
| 700 | 28 | 704.9 | 704.9 | 711.2 | 698.5 | 711.2 | 723.9 | 736.6 | 736.6 | 736.6 | 736.6 | 755.7 | 787.4 | 787.4 | 787.4 | 787.4 | 831.9 | 898.7 | 892.3 | 914.4 | 946.2 |
| 750 | 30 | 755.7 | 755.7 | 755.7 | 755.7 | 768.4 | 774.7 | 793.8 | 793.8 | 793.8 | 793.8 | 806.5 | 844.6 | 844.6 | 844.6 | 844.6 | 882.7 | 952.5 | 946.2 | 971.6 | 1009.7 |
| 800 | 32 | 806.5 | 806.5 | 812.8 | 812.8 | 812.8 | 825.5 | 850.9 | 850.9 | 850.9 | 850.9 | 860.6 | 901.7 | 901.7 | 901.7 | 939.8 | 1006.6 | 1003.3 | 1022.4 | 1073.2 | |
| 850 | 34 | 857.3 | 857.3 | 863.6 | 863.6 | 863.6 | 876.3 | 901.7 | 901.7 | 901.7 | 901.7 | 911.4 | 952.5 | 952.5 | 952.5 | 990.6 | 1057.4 | 1054.1 | 1073.2 | 1136.7 | |
| 900 | 36 | 908.1 | 908.1 | 917.7 | 917.7 | 920.8 | 927.1 | 955.8 | 955.8 | 955.8 | 958.9 | 968.5 | 1006.6 | 1006.6 | 1006.6 | 1047.8 | 1117.6 | 1117.6 | 1130.3 | 1200.2 | |
| 950 | 38 | 958.9 | 952.5 | 952.5 | 952.5 | 1009.7 | 977.9 | 977.9 | 971.6 | 990.6 | 1035.1 | 1019.3 | 1016.0 | 1022.4 | 1041.4 | 1085.8 | 1111.3 | 1054.1 | 1073.2 | 1104.9 | |
| 1000 | 40 | 1009.7 | 1003.3 | 1000.3 | 1009.7 | 1060.5 | 1022.4 | 1022.4 | 1025.7 | 1047.8 | 1098.6 | 1070.1 | 1070.1 | 1076.5 | 1098.6 | 1149.4 | 1162.1 | 1114.6 | 1127.3 | 1155.7 | |
| 1050 | 42 | 1060.5 | 1054.1 | 1051.1 | 1066.8 | 1111.3 | 1079.5 | 1073.2 | 1076.5 | 1104.9 | 1149.4 | 1124.0 | 1120.9 | 1127.3 | 1155.7 | 1200.2 | 1219.2 | 1165.4 | 1178.1 | 1219.2 | |
| 1100 | 44 | 1111.3 | 1104.9 | 1104.9 | 1111.3 | 1155.7 | 1130.3 | 1130.3 | 1130.3 | 1162.1 | 1206.5 | 1178.1 | 1181.1 | 1181.1 | 1212.9 | 1257.3 | 1276.4 | 1219.2 | 1231.9 | 1270.0 | |
| 1150 | 46 | 1162.1 | 1152.7 | 1168.4 | 1162.1 | 1219.2 | 1181.1 | 1178.1 | 1193.8 | 1212.9 | 1270.0 | 1228.9 | 1228.9 | 1244.6 | 1263.7 | 1320.8 | 1327.2 | 1273.3 | 1289.1 | 1327.2 | |
| 1200 | 48 | 1212.9 | 1209.8 | 1206.5 | 1219.2 | 1270.0 | 1231.9 | 1235.2 | 1244.6 | 1270.0 | 1320.8 | 1279.7 | 1286.0 | 1295.4 | 1320.8 | 1371.6 | 1384.3 | 1324.1 | 1346.2 | 1390.7 | |
| 1250 | 50 | 1263.7 | 1244.6 | 1257.3 | 1270.0 | - | 1282.7 | 1295.4 | 1295.4 | 1320.8 | - | 1333.5 | 1346.2 | 1346.2 | 1371.6 | - | 1435.1 | 1378.0 | 1403.4 | 1447.8 | |
| 1300 | 52 | 1314.5 | 1320.8 | 1308.1 | 1320.8 | - | 1333.5 | 1346.2 | 1346.2 | 1371.6 | - | 1384.3 | 1397.0 | 1397.0 | 1422.4 | - | 1492.3 | 1428.8 | 1454.2 | 1498.6 | |
| 1350 | 54 | 1358.9 | 1352.6 | 1352.6 | 1378.0 | - | 1384.3 | 1403.4 | 1403.4 | 1428.8 | - | 1435.1 | 1454.2 | 1454.2 | 1479.6 | - | 1549.4 | 1492.3 | 1517.8 | 1555.8 | |
| 1400 | 56 | 1409.7 | 1403.4 | 1403.4 | 1428.8 | - | 1435.1 | 1454.2 | 1454.2 | 1479.6 | - | 1485.9 | 1505.0 | 1505.0 | 1530.4 | - | 1606.6 | 1543.1 | 1568.5 | 1612.9 | |
| 1450 | 58 | 1460.5 | 1447.8 | 1454.1 | 1473.2 | - | 1485.9 | 1511.3 | 1505.0 | 1536.7 | - | 1536.7 | 1562.1 | 1555.8 | 1587.5 | - | 1663.7 | 1593.8 | 1619.3 | 1663.7 | |
| 1500 | 60 | 1511.3 | 1524.0 | 1517.7 | 1530.4 | - | 1536.7 | 1562.1 | 1568.5 | 1593.9 | - | 1587.5 | 1612.9 | 1619.3 | 1644.7 | - | 1714.5 | 1644.7 | 1682.8 | 1733.6 | |

* NPS 22 in. (DN 550mm) for reference only. Size not listed in ASME B16.47.
 = For information only

DIMENSIONS FOR SPIRAL -WOUND GASKETS USED WITH ASME B16.47 SERIES 'B' FLANGES

| FLANGES SIZE | | d1 | | | | | d2 | | | | | d3 | | | | | d4 | | | | |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| DN mm | NPS in. | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs | 150 lbs | 300 lbs | 400 lbs | 600 lbs | 900 lbs |
| 650 | 26 | 654.1 | 654.1 | 654.1 | 644.7 | 666.8 | 673.1 | 673.1 | 666.8 | 663.7 | 692.2 | 698.5 | 711.2 | 698.5 | 714.5 | 749.3 | 725.4 | 771.7 | 746.3 | 765.3 | |
| 700 | 28 | 704.9 | 704.9 | 701.8 | 685.8 | 717.6 | 723.9 | 723.9 | 714.5 | 704.9 | 743.0 | 749.3 | 762.0 | 749.3 | 755.7 | 793.8 | 775.2 | 825.5 | 801.9 | 819.2 | |
| 750 | 30 | 755.7 | 755.7 | 752.6 | 752.6 | 781.4 | 774.7 | 774.7 | 765.3 | 778.0 | 806.5 | 800.1 | 812.8 | 806.5 | 828.8 | 857.3 | 827.0 | 886.0 | 857.3 | 879.6 | |
| 800 | 32 | 806.5 | 806.5 | 800.1 | 793.8 | 838.2 | 825.5 | 825.5 | 812.8 | 831.9 | 863.6 | 850.9 | 863.8 | 860.6 | 882.7 | 914.4 | 881.0 | 939.8 | 911.4 | 933.5 | |
| 850 | 34 | 857.3 | 857.3 | 850.9 | 850.9 | 895.4 | 876.3 | 876.3 | 866.9 | 889.0 | 920.8 | 908.1 | 914.4 | 911.4 | 939.8 | 971.6 | 935.0 | 993.9 | 962.2 | 990.7 | |
| 900 | 36 | 908.1 | 908.1 | 898.7 | 901.7 | 920.8 | 927.1 | 927.1 | 917.7 | 939.8 | 946.2 | 958.9 | 965.2 | 965.2 | 990.6 | 997.0 | 987.5 | 1047.8 | 1022.4 | 1047.8 | |
| 950 | 38 | 958.9 | 971.6 | 952.5 | 952.5 | 1009.7 | 974.6 | 1009.7 | 971.6 | | | | | | | | | | | | |