

# 1. SPIRAL WOUND GASKETS



## PROPERTIES AND APPLICATION

Spiral wound gaskets are special semi-metallic gaskets of great resilience, therefore they are very suitable for applications featuring heavy operating conditions. Spiral wound gaskets are manufactured by spirally winding a V-shaped metal strip and a strip of non-metallic filler material. The metal strip holds the filler, providing the gasket with mechanical resistance and resilience. Spiral wound gaskets can be reinforced by an outer centering ring and/or inner retaining ring. The outer centering ring controls the compression and holds the gasket centrally within the bolt circle. The inner retaining ring increases the axial rigidity and resilience of the gasket. Spiral wound gaskets should always be in contact with the flange and should not protrude into the pipe or project from the flange. Spiral wound gaskets can be used for sealing flange joints, manhole and handhold covers, tube covers, boilers, heat exchangers, pressure vessels, pumps, compressors and valves; in industries such as petrochemical, pharmaceutical, shipbuilding, and food processing, in power industries and nuclear power stations. They are ideal for steam, oil, liquids, gases, acids, alkalines, various organic mediums and solvents.

MS 10	
MS 12	
MS 14	
MS 16	
MS 10 T	

## ADVANTAGES:

- Sealing under heavy operating conditions
- Strong stress compensation, stable and reliable sealing performance even under frequent pressure fluctuation condition
- Solid construction provides stability and sealability even when the sealing surfaces are slightly corroded or bent
- Easy installation

## SHAPE AND CONSTRUCTION

TESNILA spiral wound gaskets are produced in several styles and combination of materials to fit the most stringent application. TESNILA spiral wound gaskets are usually of circular shape, however TESNILA can produce them in other shapes such as: oval, rectangular, with round corners, etc. Our standard production program comprises a range of spiral wound gaskets with inner diameters of 10 to 2200 mm and a nominal thickness of 3.2, 4.5 and 6.5mm. Spiral wound gaskets of non-standard dimensions and shapes, and larger diameters are available on request.

### Gasket standard styles:

- Gaskets without guide and inner ring (Type MS 10)
- Gaskets without guide and inner ring (Type MS 10T)\*
- Gaskets with inner ring (Type MS 12)
- Gaskets with guide (outer) ring (Type MS 14)
- Gaskets with guide and with inner ring (Type MS 16)

\* With PTFE sealing zone



# 1. SPIRAL WOUND GASKETS

## Metallic strip

The standard thickness of the metallic strip is 0,2 mm.

MATERIALS FOR METALLIC STRIP	
ASTM	DIN Material No.
AISI 304	1.4301
AISI 316	1.4401
AISI 321	1.4541
AISI 316 Ti	1.4571
Monel (NiCu30Fe)	2.4360

## Filler

Filler is normally used for thicknesses from 0,5 mm to 0,6 mm.

- Flexible graphite 98%
- Flexible graphite 99,85%
- PTFE
- Ceramic

## Centering ring

The centering ring does not come into direct contact with contained fluid. It is normally made of carbon steel and electro plated or painted to avoid corrosion. Other materials are available on request.

## Inner ring

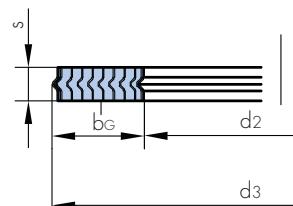
Inner ring is used to avoid excessive compression due to high seating stress in high-pressure service and it is also used to reduce turbulence in the flange area. It is normally made of the same material as the gasket metallic strip.

## DIMENSIONS

### Manufacturing sizes

This limitations are general and can vary according to the special customer

LIMITATIONS FOR MANUFACTURING DIMENSIONS			
Thickness s [mm]	Max diameter d <sub>3</sub> [mm]	Maximum width - b <sub>G</sub> [mm]	
		Graphite	PTFE
2,5	300	16	13
3,2	700	22	19
4,5	1150	30	24
6,5	2500	35	24



## Thickness

The standard manufacturing thicknesses for spiral wound gaskets are: 3,2mm; 4,5mm; 6,5mm (measured across metallic strip not including the filler, which protrudes slightly beyond the metal).

## Manufacturing tolerances

The tolerance of the gasket diameters (d<sub>1</sub>, d<sub>2</sub>, d<sub>3</sub>, d<sub>4</sub>, s, s<sub>1</sub>) are stipulated by ASME B 16.20 and EN 1514-2 standards. The gaskets designed for non-standard flanges meet the recommendations by the ASME B 16.20.

## Dimensions

The dimensions of the standard SWG meet the ASME, BS and EN (DIN) standards.



# 1. SPIRAL WOUND GASKETS



STANDARDS FOR SWG USED WITH FLANGES											
SWG Standard						Flange Standard					
DIN Standard						DIN 2632 - 2638					
EN 1514-2						PrEn 1092-1, flanges					
ASME B 16.20 (API 601)						ANSI B 16.5					
ASME B 16.20 (API 601)						ASME B 16.47 (API 605)					
ASME B 16.20 (API 601)						MSS SP 44					
ASME B 16.20						ANSI B 16.5					
ASME B 16.20						BS 1560					
ASME B 16.20						ASME B 16.47					
EN 1514-2 (DIN 2691)						DIN 2512					
EN 1514-2 (DIN 2692)						DIN 2513					
ANSI B16.5						ANSI B16.21					

## ASME B 16.20 (API 601) for ANSI B16.5 flanges

DN	d1					d2					d3			d4						
	In	150-300	400-600	900	1500	2500	150-300	400-600	900	1500	2500	150-600	900-2500	150	300	400	600	900	1500	2500
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	69.9
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	76.2
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	85.9
1 1/4	38.1	38.1	38.1	38.1	38.1	33.3	33.3	34.7	34.7	34.7	39.6	39.6	60.5	76.2	82.6	82.6	88.9	88.9	104.9	104.9
1 1/2	44.5	44.5	44.5	44.5	44.5	54.1	54.1	47.8	47.8	47.8	69.9	69.9	85.9	95.3	95.3	95.3	98.6	98.6	117.6	117.6
2	55.6	55.6	55.6	55.6	52.3	52.3	69.9	69.9	58.7	58.7	85.9	85.9	104.9	111.3	111.3	111.3	143.0	143.0	146.1	146.1
2 1/2	66.5	66.5	66.5	63.5	63.5	82.6	82.6	69.9	69.9	98.6	98.6	124.0	130.3	130.3	130.3	165.1	165.1	168.4	168.4	
3	81.0	81.0	81.0	81.0	81.0	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	174.8	174.8
4	106.4	106.4	106.4	106.4	106.4	127.0	120.7	120.7	117.6	117.6	149.4	149.4	174.8	181.1	177.8	193.8	206.5	206.5	235.0	235.0
5	131.8	131.8	131.8	131.8	131.8	155.7	147.6	147.6	143.0	143.0	177.8	177.8	196.9	219.5	219.5	219.5	247.7	247.7	254.0	279.4
6	157.2	157.2	157.2	157.2	157.2	182.6	174.8	174.8	171.5	171.5	209.6	209.6	222.3	251.0	247.7	266.7	289.1	289.1	317.5	317.5
8	215.9	209.6	209.6	206.2	200.2	233.4	225.6	222.3	215.9	215.9	263.7	257.3	279.4	308.1	308.1	320.8	358.9	358.9	352.6	387.4
10	268.2	260.4	260.4	257.8	247.7	287.3	274.6	276.4	266.7	270.0	317.5	311.2	339.9	362.0	362.0	358.9	400.1	435.1	435.1	476.3
12	317.5	317.5	314.5	314.5	292.1	339.9	327.2	323.9	323.9	317.5	374.7	368.3	409.7	422.4	422.4	419.1	457.2	498.6	520.7	549.4
14	349.3	349.3	342.9	339.9	371.6	362.0	356.6	362.0	406.4	406.4	400.1	450.9	485.9	482.6	492.3	520.7	577.9	577.9		
16	400.1	400.1	393.7	387.4	422.4	412.8	412.8	406.7	463.6	463.6	457.2	514.4	539.8	536.7	565.2	574.8	641.4	641.4		
18	449.3	449.3	444.5	438.2	474.7	469.9	463.6	463.6	527.1	527.1	520.7	549.4	596.9	593.9	612.9	638.3	704.9	704.9		
20	500.1	500.1	495.3	489.0	525.5	520.7	520.7	514.4	577.9	577.9	571.5	606.6	654.1	647.7	682.8	698.5	755.7	755.7		
24	603.3	603.3	603.3	577.9	628.7	628.7	616.0	685.8	685.8	679.5	717.6	774.7	768.4	790.7	838.2	901.7				

## ASME B16.47 Series B for API 605 flanges

DN	d1					d2					d3			d4						
	In	150	300	400	600	900	150	300	400	600	900	150	300	400	600	900	150	300	400	
26	654.1	654.1	654.1	644.7	673.1	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	838.2
28	704.9	704.9	701.8	692.2	723.9	723.9	723.9	714.5	704.9	743.0	749.3	762.0	749.3	755.7	800.1	776.2	825.5	800.1	819.2	901.7
30	755.7	755.7	752.6	752.6	752.6	787.4	774.7	765.3	778.0	806.5	806.5	806.5	812.8	828.8	857.3	827.0	886.0	857.3	879.6	958.3
32	806.5	806.5	800.1	793.8	838.2	825.5	825.5	812.8	831.9	863.6	850.9	863.6	858.5	882.7	914.4	881.1	939.8	911.4	935.5	1016.0
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	997.0	1073.2
36	908.1	908.1	898.7	901.7	927.1	927.1	917.7	939.8	946.2	958.9	962.2	965.2	990.6	997.0	987.6	1047.8	1022.4	1041.4	1085.9	1047.8
38	958.9	958.9	952.5	952.5	1009.7	974.6	974.6	971.6	990.6	1035.1	1009.7	1047.8	1022.4	1041.4	1085.9	1044.7	1098.6	1073.2	1104.9	1200.2
40	1009.7	1003.3	1000.3	1009.7	1060.5	1022.4	1060.5	1025.7	1047.8	1098.6	1063.8	1098.6	1076.5	1098.6	1149.4	1095.5	1149.4	1127.3	1155.7	1251.0
42	1060.5	1054.1	1051.1	1066.8	1111.3	1079.5	1111.3	1076.5	1104.9	1149.4	1114.6	1149.4	1127.3	1155.7	1200.2	1200.2	1178.1	1219.2	1301.8	
44	1111.3	1124.0	1104.9	1111.3	1155.7	1124.0	1124.0	1130.3	1162.1	1206.5	1165.4	1202.0	1181.1	1212.9	1257.3	1197.1	1251.0	1231.9	1270.0	
46	1162.1	1178.1	1168.4	1162.1	1219.2	1181.1	1216.2	1193.8	1212.9	1270.0	1224.0	1254.3	1244.6	1263.7	1320.8	1255.7	1317.8	1289.1	1327.2	1435.1
48	1212.9	1231.9	1206.5	1219.2	1270.0	1231.9	1263.7	1244.6	1270.0	1320.8	1270.0	1311.4	1295.4	1320.8	1371.6	1306.6	1368.6	1346.2	1390.7	1485.9
50	1263.7	1267.0	1257.3	1270.0	1282.7	1317.8	1295.4	1320.8	1325.6	1355.9	1346.2	1371.6	1371.6	1371.6	1357.4	1419.4	1403.4	1447.8		
52	1314.5	1317.8	1308.1	1320.8	1335.5	1368.6	1346.2	1371.6	1376.4	1406.7	1397.0	1422.4	1408.2	1470.2	1454.2	1498.6				
54	1365.3	1365.3	1352.6	1378.0	1384.3	1403.4	1403.4	1428.8	1422.4	1454.2	1454.2	1479.6	1463.8	1530.4	1514.6	1593.8	1568.5	1612.9		
56	1422.4	1428.8	1403.4	1428.8	1444.8	1479.6	1454.2	1479.6	1477.8	1524.0	1505.0	1530.4	1528.8	1573.3	1555.8	1587.5	1579.6	1655.8	1619.3	1663.7
58	1478.0</																			

# 1. SPIRAL WOUND GASKETS

## BS 1560 for ANSI B16.5 flanges

NPS	DN	d1		d2		d3		d4							
		mm	in	150-400	600-2500	150-400	600-2500	150-2500	150	300	400	600	900	1500	2500
15	1/2	12,7	12,7	19,1	19,1	31,8	44,4	50,8	50,8	50,8	60,3	60,3	66,7		
20	3/4	20,6	20,6	27	27	39,7	53,9	63,5	63,5	63,5	66,7	66,7	73		
25	1	27	27	33,3	33,3	47,6	63,5	69,8	69,8	69,8	76,2	76,2	82,5		
32	1 1/4	41,3	39,7	47,6	46	60,3	73	79,4	79,4	79,4	85,7	85,7	101,6		
40	1 1/2	49,2	47,6	55,6	54	69,9	82,5	92,1	92,1	92,1	95,2	95,2	114,3		
50	2	61,9	60,3	71,4	69,9	85,7	101,6	108	108	108	139,7	139,7	142,8		
65	2 1/2	74,6	73	84,1	82,6	98,4	120,6	127	127	127	161,9	161,9	165,1		
80	3	95,3	92,1	104,8	101,6	120,7	133,4	146,1	146,1	146,1	165,1	171,5	193,7		
90	3 1/2	108	104,8	117,5	114,3	133,4	158,8	161,9	158,7	158,7					
100	4	117,5	114,3	130,2	127	149,2	171,5	177,8	174,6	190,5	203,2	206,4	231,7		
125	5	144,5	141,3	157,2	154	177,8	193,7	212,7	209,5	238,1	244,5	250,8	276,2		
150	6	171,5	168,3	184,2	181	209,6	219,1	247,7	244,5	263,5	285,8	279,4	314,3		
200	8	222,3	219,1	235	231,8	263,5	276,2	304,8	301,6	317,5	355,6	349,3	384,1		
250	10	276,2	269,9	288,9	282,6	317,5	336,5	358,8	355,6	396,9	431,8	473			
300	12	330,2	323,8	342,9	336,5	374,6	406,4	419,1	415,9	454	495,3	517,5	546,1		
350	14	361,9	355,6	374,6	368,3	406,4	447,7	482,6	479,4	488,9	517,5	574,7			
400	16	412,7	406,4	425,4	419,1	463,5	511,2	536,4	533,4	561,9	571,5	638,1			
450	18	466,7	460,4	479,4	473,1	527	546,1	593,7	590,5	609,6	635	701,7			
500	20	517,5	511,2	530,2	523,9	577,8	603,2	650,9	644,5	679,5	695,3	752,4			
650	22	574,4	568,4	587,4	581,1	635	657,2	701,7	698,5	730,3					
600	24	622,3	615,9	635	628,6	685,8	714,4	771,5	765,2	787,4	835	898,5			

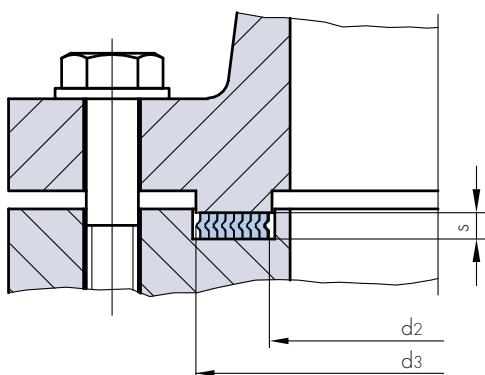
## ASME B 16.47 Series A for MSS SP 44 flanges

DN	d1					d2				d3				d4					
	in	150	300	400	600	900	150	300	400	600	900	150	300	400	600	900			
26	654,1	654,1	660,4	647,7	666,8	673,1	685,8	685,8	685,8	704,9	736,6	736,6	736,6	736,6	736,6	736,6	736,6	736,6	
28	704,9	704,9	711,2	698,5	711,2	723,9	736,6	736,6	736,6	755,7	787,4	787,4	787,4	787,4	787,4	787,4	787,4	787,4	
30	755,7	755,7	755,7	755,7	774,7	774,7	793,8	793,8	793,8	806,5	844,6	844,6	844,6	844,6	844,6	844,6	844,6	844,6	
32	806,5	806,5	812,8	812,8	825,5	850,9	850,9	850,9	850,9	860,6	901,7	901,7	901,7	901,7	901,7	901,7	901,7	901,7	
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	952,5	952,5	952,5	952,5	
36	908,1	908,1	917,7	917,7	920,8	927,1	955,8	955,8	955,8	958,9	1006,6	1006,6	1006,6	1006,6	1006,6	1006,6	1006,6	1006,6	
38	958,9	952,5	1009,7	1009,7	1009,7	1028,7	1022,4	1025,7	1047,8	1098,6	1070,1	1070,1	1076,5	1098,6	1149,4	1041,4	1085,9	1111,3	
40	1009,7	1003,3	1000,3	1009,7	1060,5	1028,7	1022,4	1025,7	1047,8	1098,6	1070,1	1070,1	1076,5	1098,6	1149,4	1162,1	1113,6	1113,6	
42	1050,5	1051,4	1051,1	1066,8	1111,3	1079,5	1073,2	1076,5	1104,9	1149,4	1120,9	1127,3	1155,7	1200,2	1219,2	1165,4	1178,1	1178,1	
44	1111,3	1104,9	1104,9	1111,3	1155,7	1130,3	1130,3	1162,1	1206,5	1178,1	1181,1	1181,1	1212,9	1257,3	1276,4	1219,2	1231,9	1231,9	
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	
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	
50	1263,7	1244,6	1257,3	1270,0	1282,7	1295,4	1295,4	1320,8	1320,8	1335,3	1346,2	1346,2	1346,2	1371,6	1435,1	1378,0	1403,4	1447,8	
52	1314,5	1320,8	1308,1	1320,8	1333,5	1346,2	1346,2	1371,6	1371,6	1384,3	1397,0	1397,0	1422,4	1422,4	1422,4	1492,3	1428,8	1454,2	
54	1358,9	1352,6	1352,6	1378,0	1384,3	1403,4	1403,4	1428,8	1428,8	1435,1	1454,2	1454,2	1479,6	1479,6	1479,6	1549,4	1492,3	1517,7	
56	1409,7	1403,4	1403,4	1428,8	1435,1	1454,2	1454,2	1479,6	1479,6	1485,9	1505,0	1505,0	1530,4	1530,4	1530,4	1606,6	1543,1	1568,5	
58	1460,5	1447,8	1454,2	1473,2	1485,9	1511,3	1505,0	1536,7	1536,7	1536,7	1562,1	1555,8	1555,8	1587,5	1587,5	1587,5	1663,7	1593,9	1619,3
60	1511,3	1524,0	1517,7	1530,4	1535,7	1562,1	1568,5	1593,9	1593,9	1587,5	1612,9	1619,3	1644,7	1644,7	1644,7	1714,5	1644,7	1682,8	
																		1733,6	

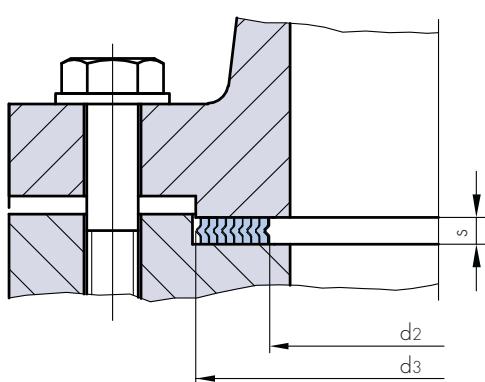
## DIN 2632-2638 flanges

DN	d1		d2		d3		d4									
	mm	PN 10-320	PN 10-320	PN 10-40	PN 64-320	PN 10	PN 16	PN 25	PN 40	PN 64	PN 100	PN 160	PN 250	PN 320	PN 400	
10	18	24	36	36	46	46	46	46	56	56	56	67	67	67	67	67
15	22	28	40	40	51	51	51	51	61	61	61	72	72	72	72	78
20	27	33	47	47	61	61	61	61	72	72	72	77	77	77	77	
25	34	40	54	54	71	71	71	71	82	82	82	83	83	83	83	104
32	43	49	65	65	82	82	82	82	90	90	90	90	90	90	90	
40	48	54	70	70	92	92	92	92	103	103	103	103	103	103	109	135
50	57	66	84	84	107	107	107	107	113	113	119	119	124	134	153	150
65	73	82	102	104	127	127	127	127	137	143	143	143	170	170	192	
80	86	95	115	119	142	142	142	142	148	154	154	154	170	190	207	
100	108	120	140	144	162	162	168	168	174	180	180	180	202	229	256	
125	134	146	168	172	192	192	194	194	210	217	217	217	242	274	301	
150	162	174	196	200	217	217	224	224	247	257	257	257	284	311	348	
175	183	195	221	227	247	247	254	254	265	277	287	287	316	358	402	
200	213	225	251	257	272	272	284	284	290	309	324	324	358	398	442	
250	267	279	307	315	327	328	340	352	364	391	398	442				
300	318	330	358	366	377	383										

# 1. SPIRAL WOUND GASKETS

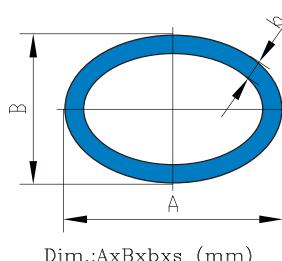


SWG FOR TONGUE and GROOVE FLANGES - EN 1514-2 (DIN 2691)  
and ANSI B16.5 according to DIN 2512 AND ANSI B16.21

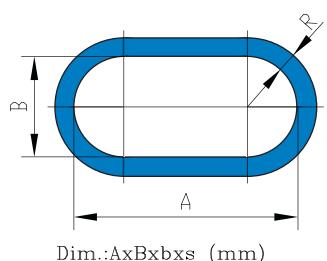


SWG FOR MALE and FEMALE FLANGES - EN 1514-2 (DIN 2692)  
and ANSI B16.5 according to DIN 2513 and ANSI B16.21

Oval shape



Oblong (stadion) shape



## GASKET ORDERING EXAMPLE:

Spiral wound gasket MS 16,  
API 601 for ANSI B16.5, 2"-150lbs,  
Winding, inner ring: AISI 316,  
Filler: Graphite 98%,  
Centering ring: CS

## NON-STANDARD SWG

All standard types can be delivered in non-standard dimensions according to customer request.

## Gaskets for Boilers Handholes and Manholes:

Gaskets Type MS 10 can be manufactured in other shapes like oval and oblong (stadion). There is no specific standard for this type of gasket. When ordering it providing complete specifications is required: Internal dimensions (AxB), width (b) and thickness (s) or a drawing.

## GASKET ORDERING EXAMPLE:

Spiral wound gasket MS 10,  
A x B x b x s  
Winding: AISI 316,  
Filler: Graphite 98%

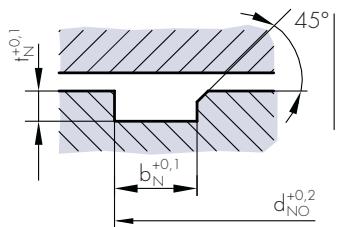


# 1. SPIRAL WOUND GASKETS

## Gasket compression

Spiral-wound gaskets shall be designed in such a way that a uniform bolt stress, based on the nominal root diameter will compress the gasket to a thickness( $e$ ).

STANDARD GASKET COMPRESSION			
s	3,5	4,5	6,5
e	$2,5^{\pm 0,1}$	$3,3^{\pm 0,1}$	$4,7^{\pm 0,1}$



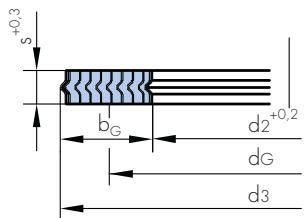
## Connections with non-load bearing gaskets

Since no standards exist as yet for the use of spiral-wound gaskets in no-load bearing connections, the application of guidelines from the adjacent table is recommended.

GASKETS AND GROOVES DIMENSIONS								
Spiral-wound gasket					Groove			
d_M	b_G	d_3	d_2	s	d_NO	b_N	d_NI	t_N
< 300	5-9	$d_G + b_G$	$d_G - b_G$	3,5	$d_3 + 1$	$b_G / 0,86$	$d_{NO} - 2b_N$	$2,5^{\pm 0,1}$
< 1000	9-17	$d_G + b_G$	$d_G - b_G$	3,5	$d_3 + 1,5$		$d_{NO} - 2b_N$	$2,5^{\pm 0,1}$
< 300	5-9	$d_G + b_G$	$d_G - b_G$	4,5	$d_3 + 1$		$d_{NO} - 2b_N$	$3,3^{\pm 0,1}$
< 1000	9-17	$d_G + b_G$	$d_G - b_G$	4,5	$d_3 + 1,5$		$d_{NO} - 2b_N$	$3,3^{\pm 0,1}$

$b_G$ - gasket width

$b_N$ - groove width



## Tolerance Table

Flange size		Projection and recess			Smooth contactface					
NPS	DN	d2	d3	s1	d1	d2	d3	d4	s1	s2
< 10"	< 300	$\pm 0,5$	$\pm 0,5$	$+ 0,8$ $+ 0,1$	$\pm 0,8$	$\pm 0,8$	$\pm 0,8$	$\pm 0,8$	$+ 0,1$	$+ 0,25$ $-0,15$
10" - 24"	300 - 700	$\pm 0,8$	$\pm 0,8$	$+ 0,8$ $+ 0,1$	$\pm 0,8$	$\pm 0,8$	$\pm 0,8$	$+ 0,8$ $-1,6$	$+ 0,8$ $+ 0,1$	$+ 0,25$ $-0,15$
26" - 50"	800 - 1200	$\pm 1,2$	$\pm 1,2$	$+ 0,8$ $+ 0,1$	$\pm 1,6$	$\pm 1,6$	$\pm 1,6$	$+ 0,8$ $-2,0$	$+ 0,8$ $+ 0,1$	$+ 0,25$ $-0,15$
> 50"	> 1200				$\pm 2,4$	$\pm 2,4$	$\pm 2,4$	$+ 0,8$ $-3,0$	$+ 0,8$ $+ 0,1$	$+ 0,25$ $-0,15$

## Gasket parameters

Gasket Type	MATERIAL (Jacket)	DIN 2505		ASME	
		k1 [mm]	k0xkD [N/mm]	m	y [MPa]
MS 10, MS 12, MS 14, MS 16	Steel, Cr-Steel	1,3xd	50xd	1,3	50
	CrNi-Steel, Monel	1,4xd	55xd	1,4	55
	CrNi-Steel (Graphite/ PTFE)	1,2xd	40xd	1,2	40

## LOAD BEARING GASKETS

