SALMARCON®
We make it seal!

SEMI METAL
SEALING SOLUTIONS

TRUSTED TO DELIVER INNOVATIVE SOLUTIONS

SEMI METAL
GASKETS

www.salmarcon.com

ABOUT SALMARCON

Established in 2012, as a private owned company, we since have proved to be a successful growing story. Salmarcon started in the last quarter of 2021 Romanian operations.
We are specialist in the manufacturing and supply of high-quality industrial sealing products, fluid control, gaskets, bolts, nuts, stud bolds, washers and associated services in Turkey.
We are more than 50 employees in a 15.000m^2 active area located in Canakkale.

A true asset

A deep understanding of each customer with a strong commitment to be building a long-term partnership by offering the best products and solutions built by an extensive experience and knowledge.

Expert sealing solutions

With a mix of world class products and knowledgeable people we quickly attracted big clients.

Ever since we have proven worthy of the trust, and we have turned into one of the top players of the Turkish gasket industry as well as having entered European supply chains.

Certified quality

Our products are amongst the most approved and certified ones within the industry.
We deliver proven user safety and globally trusted products worldwide.

- EN ISO 9001:2015, ISO 14001:2015 as well as ISO 45001:2018 certified
- TA LUFT
- FIRE SAFE TEST (API 6FB)
- PED 2014/68/EU for gaskets and fasteners
- ASME B16.20 Preformance Test on SWG


Our portfolio & applications

From the leading manufacturing companies within the gasket and sealing industry we quickly became a trusted partner. our portfolio is built on a range of unique products and solutions fitting the specific needs of our customers. The portfolio is delivering a great supplementation assuring a more simple and fast reacting supply chain of our customers.

Salmarcon – Semi-metal gaskets

Spiral Wound Gaskets from our top modern production creates a very leak tight, reliable seal.

Suitable for high temperatures and pressures.

The Kammprofile is a Grooved, covered metal gaskets consisting of a serrated metallic core with a soft facing material.

Corrugated gaskets from our top modern production with a metallic core encapsulated by a graphite coating. A robust and easy to handle gasket.

Metal Jacketed Gaskets with a compressible insert that makes the gasket suit the flange. Metal jacketed gaskets can be made with a broad range of metals and high temperature fillers.

Metal Reinforced NBR, CSM Hypalon, EPDM, Viton and NR Gaskets.
All types according to DIN 1514-1.
Suitable for installation between flanges made of metal or plastic, or any combination of these.

Manhole gaskets handling 450°C in continuous operation. The material does not stick on the flange and is very adoptable to poor flanges as well as able handle most types of media.

We also supply an extensive range of specialty gaskets to complete our quality sealing portfolio, including joints, seals and hoses, all designed to meet the criteria of our global customer base.

Our solutions for all applications

Pipes & Flanges

Scrubbers

Heat Exchangers

Food Reactors

Pumps

Compressors

Gas heaters

Steam

Oil + Gas

Chemical

Mining

Petro chemical

SALMARCON spiral wound gaskets

Spiral wound gaskets can recover under the action of fluctuating loads caused by process fluid pressure and temperature changes, flange face temperature variations, flange rotation, bolt stress relaxation and creep.
The gasket sealing element consists of a pre-formed metallic winding strip with layers of a softer, more compressible sealing material which, during compression, is densified and flows to fill imperfections in the flange surfaces when the gasket is seated. The metal strip holds the filler giving the gasket mechanical resistance and resilience.
Salmarcon spiral wound gaskets can be manufactured from a range of filler materials according to different service conditions:

Filler Material	Maximum Temperature	ASME B16.20 Colour Coding
Graphite	500°C	Grey Stripe
PTFE	260°C	White Stripe
Mica	1000°C	Light Blue Stripe
Mica and Graphite	900°C	-

Winding Material	Maximum Temperature	ASME B16.20 Colour Coding
Carbon Steel	500°C	Silver
304 Stainless Steel	650°C	Yellow
304L Stainless Steel	650°C	N/A
316L Stainless Steel	800°C	Green
Duplex UN S31803	800°C	N/A
Super Duplex UN S32750	600°C	N/A
347 Stainless Steel	800°C	Blue
321 Stainless Steel	800°C	Turquoise
Monel 400	800°C	Orange
Nickel 200	315°C	Red
Titanium Gr 2	350°C	Purple
Hastelloy B-2/B-3	700°C	Brown
Hastelloy C-2 6	700°C	Beige
Inconel 600	1000°C	Gold
Inconel 625	1000°C	Gold
Inconel X-750	1000°C	N/A
Incoloy 825	600°C	White
Zirconium	500°C	N/A
254 SMO	600°C	N/A
Titanium Gr7	500°C	N/A
Hastelloy C-22	450°C	N/A
Hastelloy G-31	450°C	N/A
Alloy 20	600°C	Black
316 Ti	900°C	N/A
316H	800°C	N/A

Please note: These temperatures given above are guidelines only and do not apply in all fluids, Please contact Technical Department for advice.

SALMARCON spiral wound gaskets basic fillers

Graphite Filled	PTFE Filled	Mica Filled
Applications:		
Used for applications requiring high integrity sealing performance	Used for applications demanding outstanding chemical resistance	High temperature and high pressure applications
Typical Properties:		
High pressure gasket designed for raised face and flat face applications	High integrity gasket designed for raised face and flat face applications	High pressure gasket designed for raised face and flat face applications
Excellent tightness properties even under fluctuating load	Resistant to virtually all chemicals	Excellent tightness properties even under fluctuating load
Easy to handle and install	Robust and easy to handle and install	Easy to handle and install
Inner ring protects windings against media and adds stability at higher pressures and for larger gasket diameters.	Inner ring protects windings against media and adds stability at higher pressures	Inner ring protects windings against media and adds stability at higher pressures and for larger gasket diameters.

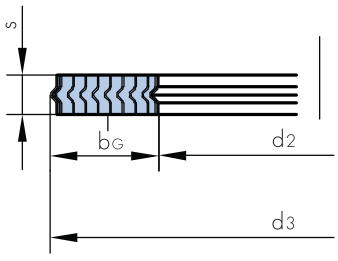
Typical Specifications:			
Sealing element :	Graphite/316L	PTFE/316L	Mica/ Inconel 600
Centering ring :	Carbon steel	Carbon steel	Inconel 600
Inner ring :	316L	316L	Inconel 600
Max. temperature :	500ºC.	260ºC.	1000ºC.
Max. pressure	>400 bar.	100 bar.	>100 bar.
Suitability for flanges to:	ASME B16.5, DIN standards, BS 10, JIS, AWWA and custom designs etc.		

Dimensions & Manufacturing sizes

Limitations for manufacturing of dimensions are general and can vary according to the special customer requirements.

LIMITATIONS FOR MANUFACTURING DIMENSIONS

Thicknesss [mm]	Max diameter d3[mm]	Maximum width - bg [mm]	
		Graphite	PTFE
2.5	2000	50	13
3.2	2000	50	19
4.5	2000	30	24
6.5	2000	35	24
7.2	3000	30	24



Thickness

The standard manufacturing thicknesses for spiral wound gaskets are: 3.2 mm; 4.5 mm (measured across metallic strip not including the filler, which protrudes 0.2-0.3 mm beyond the metal).

Manufacturing tolerances

The tolerance of the gasket diameters (d1, d2, d3, d4, s, s1, s2) 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 spiral wound gasket meet the ASME, BS and EN (DIN) standards.

ASME B16.20 GASKETS - Dimensions for Spiral-Wound Gaskets Used With ASME B16.5 Flanges

NPS (in)	d1 (mm)					d2 (mm)					d3 (mm)		d4 (mm)						
Class (lb)	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
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
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
1 1/4	38.1	38.1	38.1	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
1 1/2	44.5	44.5	44.5	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	98.6	98.6	117.6
2	55.6	55.6	55.6	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	143.0	143.0	146.1
2 1/2	66.5	66.5	66.5	63.5	63.5	82.6	82.6	69.9	69.9	69.9	98.6	98.6	124.0	130.3	130.3	130.3	165.1	165.1	168.4
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	174.8	196.9
4	106.4	102.6	102.6	97.8	97.8	127.0	120.7	120.7	117.6	117.6	149.4	149.4	174.8	181.1	177.8	193.8	206.5	209.6	235.0
5	131.8	128.3	128.3	124.5	124.5	155.7	147.6	147.6	143.0	143.0	177.8	177.8	196.9	215.9	212.9	241.3	247.7	254.0	279.4
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	251.0	247.7	266.7	289.1	282.7	317.5
8	215.9	205.7	196.9	196.9	196.9	233.4	225.6	222.3	215.9	215.9	263.7	257.3	279.4	308.1	304.8	320.8	358.9	352.6	387.4
10	268.2	255.3	246.1	246.1	246.1	287.3	274.6	276.4	266.7	270.0	317.5	311.2	339.9	362.0	358.9	400.1	435.1	435.1	476.3
12	317.5	307.3	292.1	292.1	292.1	339.9	327.2	323.9	323.9	317.5	374.7	368.3	409.7	422.4	419.1	457.2	498.6	520.7	549.4
14	349.3	342.9	320.8	320.8		371.6	362.0	355.6	362.0		406.4	400.1	450.9	485.9	482.6	492.3	520.7	577.9	
16	400.1	389.9	374.7	368.3		422.4	412.8	412.8	406.7		463.6	457.2	514.4	539.8	536.7	565.2	574.8	641.4	
18	449.3	438.2	425.5	425.5		474.7	469.9	463.6	463.6		527.1	520.7	549.4	596.9	593.9	612.9	638.3	704.9	
20	500.1	489	482.6	476.3		525.5	520.7	520.7	514.4		577.9	571.5	606.6	654.1	647.7	682.8	698.5	755.7	
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	

Dimensions for Spiral-Wound Gaskets Used With ASME B16.47 SERIES B Flanges

NPS (in)	d1 (mm)					d2 (mm)					d3 (mm)					d4 (mm)				
Class (lb)	150	300	400	600	900	150	300	400	600	900	150	300	400	600	900	150	300	400	600	900
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	838.2
28	704.9	701.8	701.8	685.8	717.6	723.9	723.9	714.5	704.9	743	749.3	762	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	781.1	774.7	774.7	765.3	778	806.5	800.1	812.8	806.5	828.8	857.3	827	886	857.3	879.6	958.9
32	806.5	800.1	812.8	793.8	838.2	825.5	825.5	812.8	831,9	863.6	850.9	863.6	860.6	882.7	914.4	881.1	939.8	911.4	933.5	1016.0
34	857.3	857.3	850.9	850.9	895.4	876.3	876.3	866.9	889	920.8	908.1	914.4	911.4	939.8	971.6	935	993.9	962.2	997.0	1073.2
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	987.6	1047.8	1022.4	1047.8	1124
38	958.9	971.6	952.5	952.5	1009.7	974.9	1009.7	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	1022.4	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	1085.9	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	1146.3	1200.2	1178.1	1219.2	1301.8
44	1111.3	1124	1104.9	1111.3	1155.7	1124	1162.1	1130.3	1162.1	1206.5	1165.4	1200.2	1181.1	1212.9	1257.3	1197.1	1251	1231.9	1270	1368.6
46	1162.1	1178.1	1168.4	1162.1	1219.2	1181.1	1216.2	1193.8	1212.9	1270	1124	1254.3	1244.6	1263.7	1320.8	1255.8	1317.8	1289.1	1327.2	1435.1
48	1212.9	1231.9	1206.5	1219.2	1270	1231.9	1263.7	1244.6	1270	1320.8	1270	1311.4	1295.4	1320.8	1371.6	1306.6	1368.6	1346.2	1390.7	1485.9
50	1263.7	1267	1257.3	1270		1282.7	1317.8	1295.4	1320.8		1325.6	1355.9	1346.2	1371.6		1357.4	1419.4	1403.4	1447.8	
52	1314.5	1317.8	1308.1	1320.8		1333.5	1368.6	1346.2	1371.6		1376.4	1406.7	1397	1422.4		1408.2	1470.2	1454.2	1498.6	
54	1365.3	1365.3	1352.6	1378.0		1384.3	1479.6	1403.4	1428.8		1422.4	1454.2	1454.2	1479.6		1463.8	1530.4	1517.7	1555.8	
56	1422.4	1428.8	1403.4	1428.8		1435.1	1535.2	1454.2	1479.6		1478	1524	1505	1530.4		1514.6	1593.9	1568.5	1612.9	
58	1478	1484.4	1454.2	1473.2		1485.9	1511.3	1505	1536.7		1528.8	1573.3	1555.8	1587.5		1579.6	1655.8	1619.3	1663.7	
60	1535.2	1557.3	1517.7	1530.4		1535.7	1589	1568	1593.9		1586	1630.4	1619.3	1644.7		1630.4	1706.6	1682.8	1733.6	

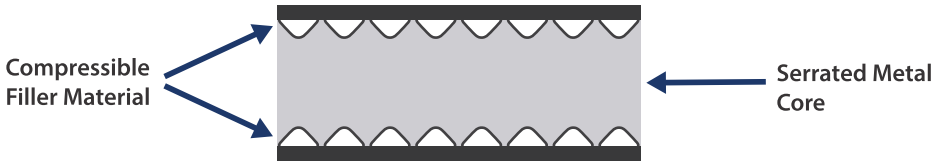
Dimensions for Spiral-Wound Gaskets Used With ASME B16.47 SERIES A Flanges

NPS (in)	d1 (mm)					d2 (mm)					d3 (mm)					d4 (mm)				
Class (lb)	150	300	400	600	900	150	300	400	600	900	150	300	400	600	900	150	300	400	600	900
26	654.05	654.05	660.4	647.7	660.4	673.1	685.8	685.8	685.8	685.8	704.85	736.6	736.6	736.6	736.6	774.7	835.2	831.85	866.9	882.65
28	704.85	704.85	711.2	698.5	711.2	723.9	736.6	736.6	736.6	736.6	755.65	787.4	787.4	787.4	787.4	831.85	898.65	892.3	914.4	946.15
30	755.65	755.65	754.6	755.7	768.4	774.7	793.75	793.75	793.75	793.75	806.45	844.55	844.55	844.55	844.55	882.65	952.5	946.15	971.55	1009.65
32	806.45	806.45	812.8	812.8	812.8	825.5	850.9	850.9	850.9	850.9	860.55	901.7	901.7	901.7	901.7	939.8	1006.6	1003.3	1022.4	1073.15
34	857.25	857.25	863.6	863.6	863.6	876.3	901.7	901.7	901.7	901.7	911.35	952.5	952.5	952.5	952.5	990.6	1057.4	1054.1	1073.2	1136.65
36	908.05	908.05	917.7	917.7	920.75	927.1	955.8	955.8	955.8	958.85	968.5	1006.6	1006.6	1006.6	1009.65	1047.75	1117.6	1117.6	1130.3	1200.15
38	958.85	952.5	952.5	952.5	1009.65	977.9	977.9	971.55	990.6	1035.05	1019.3	1016	1022.35	1041.4	1085.85	1111.25	1054.1	1073.15	1104.9	1200.15
40	1009.65	1003.3	1000.25	1009.65	1060.45	1028.7	1022.35	1025.65	1047.75	1098.55	1070.1	1070.1	1076.45	1098.55	1149.35	1162.05	1114.55	1127.25	1155.7	1250.95
42	1060.5	1054.1	1051.05	1066.8	1111.25	1079.5	1073.15	1076.45	1104.9	1149.35	1123.95	1120.9	1127.25	1155.7	1200.15	1219.2	1165.35	1178.05	1219.2	1301.75
44	1111.25	1104.9	1104.9	1111.25	1155.7	1130.3	1130.3	1130.3	1162.05	1206.5	1178.05	1181.1	1181.1	1212.85	1257.3	1276.35	1219.2	1231.9	1270	1368.55
46	1162.05	1052.7	1168.4	1162.05	1219.2	1181.1	1178.05	1193.8	1212.85	1270	1228.85	1228.85	1244.6	1263.65	1320.8	1327.15	1273.3	1289.05	1327.2	1435.1
48	1212.85	1209.8	1206.5	1219.2	1270	1231.9	1235.2	1244.6	1270	1320.8	1279.65	1286	1295.4	1320.8	1371.6	1384.3	1324.1	1346.2	1390.7	1485.9
50	1263.65	1244.6	1257.3	1270		1282.7	1295.4	1295.4	1320.8		1333.5	1346.2	1346.2	1371.6		1435.1	1377.95	1403.35	1447.8	
52	1314.45	1320.8	1308.1	1320.8		1335.5	1346.2	1346.2	1371.6		1384.3	1397	1397	1422.4		1492.25	1428.75	1454.15	1498.6	
54	1358.9	1352.6	1352.55	1377.95		1384.3	1403.35	1403.35	1428.75		1435.1	1454.15	1454.15	1479.55		1549.4	1492.25	1517.65	1555.8	
56	1409.7	1403.4	1403.35	1428.75		1435.1	1454.15	1454.15	1479.55		1485.9	1504.95	1504.95	1530.35		1606.55	1543.05	1568.45	1612.9	
58	1460.5	1447.8	1454.15	1473.2		1485.9	1511.3	1504.95	1536.7		1536.7	1562.1	1555.75	1587.5		1663.7	1593.85	1619.25	1663.7	
60	1511.3	1524	1517.65	1530.35		1535.7	1562.1	1568.45	1593.85		1587.5	1612.9	1619.25	1644.65		1714.5	1644.65	1682.75	1733.6	

SALMARCON KAMMPROFILE GASKETS

KAMMPROFILE gaskets are **excellently suited for sealing of media under extreme operating conditions**, such as high operating pressures and temperatures. Such solutions are ideal replacements for problem applications associated with other similar gaskets.
The Salmarcon Kammprofile is a composite gasket which utilizes a serrated metal core with a soft facing material. Kammprofile gaskets are also preferable due to the core material, which can be reused.

The metal core is a machined concentric serration which provide high pressure areas, ensuring that the soft coating flows into any imperfections in the flange even at relatively low bolt loads. The soft facing material is engineered to compress to the core creating the ideal sealing density in the profile grooves. The resulting in a gasket combining the benefits of soft cut materials with the advantages of metallic gaskets.



Expanded graphite is the most common facing material used for our Kammprofile gaskets. However, other materials can be used, such as PTFE for chemically aggressive duties or mica for high temperature service.

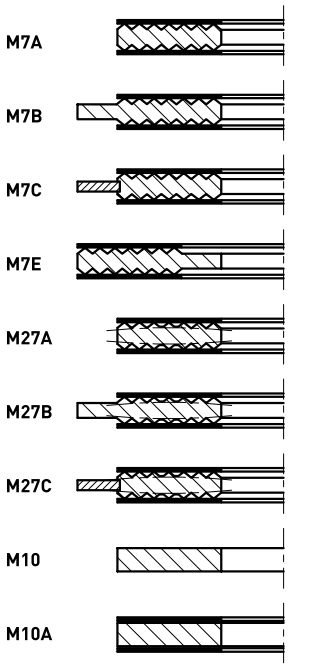
Facing	Maximum
Graphite	550ºC
PTFE	260ºC
Mica	1000ºC
KLINGERSIL® C-4430	250ºC

The material can also be manufactured from a range of core materials according to media compatibility and temperature considerations.

	Maximum Temperature
316L Stainless Steel	800°C
304 Stainless Steel	550°C
Duplex UN S31803	800°C
347 Stainless Steel	800°C
321 Stainless Steel	800°C
Monel 400	450°C
Nickel 200	315°C
Titanium Gr 2	350°C
Hastelloy B-2/B-3	450°C
Hastelloy C-276	450°C

	Maximum Temperature
Inconel 600	1000°C
Inconel 625	450°C
Incoloy 825	450°C
Zirconium	500°C
Super Duplex	600°C
254 SMO	600°C
Titanium Gr7	350°C
Hastelloy C-22	450°C
Hastelloy G-31	450°C
Alloy 20	600°C

Shape and construction

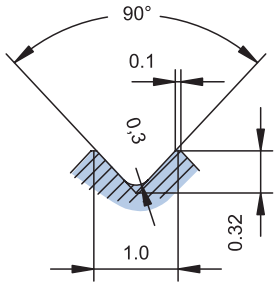


General Properties of SALMARCON Kammprofile Gaskets:

- A wide range of seating stresses with easy maintenance
- Useful when there is insufficient bolt load to seal conventional gasket materials
- Easy to handle and fit
- Suitable for a wide range of operating conditions
- The soft facing layer prevents damage to the mating flange
- Sealing is not sensitive to uneven bolt loading

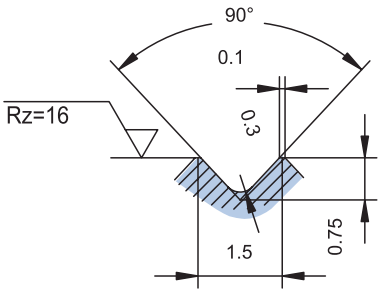
FINE GROOVE PROFILE

S1=0.5mm

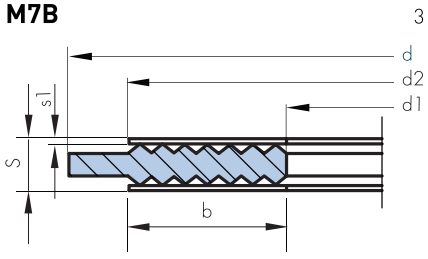


STANDARD GROOVE PROFILE

S1= 1mm



M7B



PROFILE	s1 (mm)
standard	3.0
fine	0.5

EN 12560-6 Grooved Gaskets for ASME B 16.5 flanges

NPS (in)	d1 (mm)	d2 (mm)	d3 (mm)						
	Class (lb)		150	300	400	600	900	1500	2500
1/2	23.0	33.3	44.4	50.8	50.8	50.8	60.3	60.3	66.7
3/4	28.6	39.7	53.9	63.5	63.5	63.5	66.7	66.7	73.0
1	36.5	47.6	63.5	69.8	69.8	69.8	76.2	76.2	82.5
1 1/4	44.4	60.3	73.0	79.4	79.4	79.4	85.7	85.7	101.6
1 1/2	52.4	69.8	82.5	92.1	92.1	92.1	95.2	95.2	114.3
2	69.8	88.9	101.6	108.0	108.0	108.0	139.7	139.7	142.8
2 1/2	82.5	101.6	120.6	127.0	127.0	127.0	161.9	161.9	165.1
3	98.4	123.8	133.4	146.1	146.1	146.1	165.1	171.5	193.7
3 1/2	111.1	136.5	158.8	161.9	158.7	158.7			
4	123.8	154.0	171.5	177.8	174.6	190.5	203.2	206.4	231.7
5	150.8	182.6	193.7	212.7	209.5	238.1	244.5	250.8	276.2
6	177.8	212.7	219.1	247.7	244.5	263.5	285.8	279.4	314.3
8	228.6	266.7	276.2	304.8	301.6	317.5	355.6	349.3	384.1
10	282.6	320.7	336.5	358.8	355.6	369.9	431.8	431.8	473.0
12	339.7	377.8	406.4	419.1	415.9	454.0	495.3	517.5	546.1
14	371.5	409.6	447.7	482.6	479.4	488.9	517.5	574.7	
16	422.3	466.7	511.2	536.6	533.4	561.9	571.5	638.1	
18	479.4	530.2	546.1	593.7	590.5	609.6	635.0	701.7	
20	530.2	581.0	603.2	650.9	644.5	679.5	695.3	752.4	
22	581.0	631.8	657.2	701.7	698.5	730.3			
24	631.8	682.6	714.4	771.5	765.2	787.4	835.0	898.5	

EN 1514-6 grooved gaskets for EN 1092-1 flanges

DN (mm)	d1 (mm)	d2 (mm)			d3(mm)							
	PN Class	PN 10-40	PN 63-160	PN 250-400	PN 10	PN 16	PN 25	PN 40	PN 63	PN 100	PN 160	PN 250
10	22	36	36	36	46	46	46	46	56	56	56	67
15	26	42	42	42	51	51	51	51	61	61	61	72
20	31	47	47	47	61	61	61	61				
25	36	52	52	52	71	71	71	71	82	82	82	83
32	46	62	62	66	82	82	82	82				
40	53	69	69	73	92	92	92	92	103	103	103	109
50	65	81	81	87	107	107	107	107	113	119	119	124
65	81	100	100	103	127	127	127	127	137	143	143	153
80	95	115	115	121	142	142	142	142	148	154	154	170
100	118	138	138	146	162	162	168	168	174	180	180	202
125	142	162	162	178	192	192	194	194	210	217	217	242
150	170	190	190	212	217	217	224	224	247	257	257	284
175	195	215	215	245	247	247	254	265	277	287	284	316
200	220	240	248	280	272	272	284	290	309	324	324	358
250	270	290	300	340	327	328	340	352	364	391	388	442
300	320	340	356	400	377	383	400	417	424	458	458	
350	375	395	415		437	443	457	474	486	512		
400	426	450	474		489	495	514	546	543	572		
450	480	506			539	555		571				
500	530	560	588		594	617	624	628	657	704		
600	630	664	700		695	734	731	747	764	813		
700	730	770	812		810	804	833	852	879	950		
800	830	876	886		917	911	942	974	988			
900	930	982	994		1017	1011	1042	1084	1108			
1000	1040	1098	1110		1124	1128	1154	1194	1220			
1200	1250	1320	1334		1341	1342	1364	1398	1452			

GASKET ORDERING EXAMPLE

Grooved gasket M7A, Salmarcon Kammprofile gasket 3mm SS316 core + 2 x 0.5mm Graph on both sides

SALMARCON CORRUGATED GASKETS

Corrugated gaskets are universally applicable sealing elements. Due to the wide range of shapes that they can be produced in - including rings, ovals, elongated ovals or frames, with or with- out dividers, holes and retaining plates -they continue to be used in new areas. The gaskets can be fully or partially coated. Corrugated gaskets with torque support have proven excellent when used with inflexible flanges.

Even with unmachined flanges, a satisfactory seal can be achieved with the use of suitable soft-material layers. The gas- kets can be produced in all the usual sizes up to 6000 mm.

Advantages

- Outstanding mechanical strength and thermal conductivity.
- Capable of withstanding high temperatures.
- There are almost no limitations regarding size.
- Solid construction provides stability even for large diameters and ensures trouble-free handling and installation.

Shape and construction

The metal gaskets are produced in several types to meet the most demanding applications. Shapes: Round, Oval, Rectangular, etc.

Gasket profiles

Profile	Cross - section
W1A	
W1A-3	
W1A-3·F1	
W11A	
W2A	
W12A	

Gasket limiting values

Profiles			W1A, W11A		W1A-3	
Materials			1.4541 graphite	1.4541 PTFE	1.4571 graphite	1.4571 PTFE
Recommended max. roughness of the flange surfaces	µm	from	25	50	25	50
		to	50	100	50	100
Surface pressure limits for 20 °C	N/mm²	σ_V	15	15	15	15
		$\sigma\theta$	180	180	200	200
Surface pressure limits for 300 °C	N/mm²	σ_V	20	-	20	-
		$\sigma\theta$	150	-	150	-

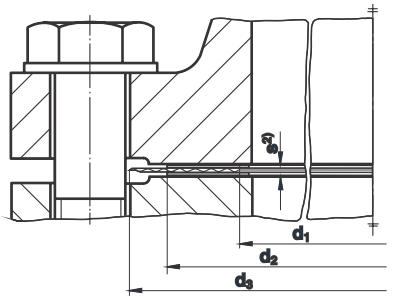
You can find gasket characteristic values in accordance with EN13555 on our homepage at www.klinger-kempchen.de

Gasket limiting values

Description		20 °C	100 °C	200 °C	300 °C	400 °C	500 °C
W1A-RS2E2	σ_V [N/mm²]	15	16	17	20	22	25
1.4571/graphite	$\sigma\theta$ [N/mm²]	180	170	160	150	140	130

FLANGES with RAISED FACE
Conforms to works standard 157 (PN 1 to PN 400)

Ordering example for a corrugated gasket with layers, Profile W11A, DN 100, PN 100, works standard 15L, made of ...1):
Corrugated gasket, W11A, DN 100, PN 100, WN 157, 1.4541 /graphite



For DIN flanges

DN	d_1	d_2	PN d_3											
			1 u. 2,5	6	10	16	25	40	63	100	160	250	320	400
10	18	34	38	38	46	46	46	46	56	56	56	67	67	67
15	22	39	43	43	51	51	51	51	61	61	61	72	72	78
20	28	50	53	53	60	60	60	60	-	-	-	-	-	-
25	35	57	63	63	70	70	70	70	82	82	82	83	92	104
32	43	65	75	75	82	82	82	82	-	-	-	-	-	-
40	49	75	85	85	92	92	92	92	103	103	103	109	119	135
50	61	87	95	95	107	107	107	107	113	119	119	124	134	150
65	77	109	115	115	127	127	127	127	137	143	143	153	170	192
80	90	120	132	132	142	142	142	142	148	154	154	170	190	207
100	115	149	152	152	162	162	168	168	174	180	180	202	229	256
125	141	175	182	182	192	192	194	194	210	217	217	242	274	301
150	169	203	207	207	218	218	224	224	247	257	257	284	311	348
175	195	233	237	237	247	247	254	265	277	287	284	316	358	402
200	220	259	262	262	272	272	284	290	309	324	324	358	398	442
250	274	312	318	318	327	328	340	352	364	391	388	442	488	-
300	325	363	373	373	377	383	400	417	424	458	458	536	-	-
350	368	421	423	423	437	443	457	474	486	512	-	-	-	-
400	420	473	473	473	489	495	514	546	543	572	-	-	-	-
450	470	524	528	528	539	555	-	571	-	-	-	-	-	-
500	520	575	578	578	594	617	624	628	657	704	-	-	-	-
600	620	675	680	680	695	734	731	747	764	813	-	-	-	-
700	720	777	785	785	810	804	833	852	879	950	-	-	-	-
800	820	882	890	890	917	911	942	974	988	-	-	-	-	-
900	920	987	990	990	1017	1011	1042	1084	1108	-	-	-	-	-
1000	1020	1091	-	-	1124	1128	1154	1194	1220	-	-	-	-	-
1200	1240	1320	-	-	1341	1342	1364	1398	1452	-	-	-	-	-
1400	1440	1520	-	-	1548	1542	1578	1618	-	-	-	-	-	-
1600	1640	1740	-	-	1772	1764	1798	1830	-	-	-	-	-	-
1800	1840	1940	-	-	1972	1964	2000	-	-	-	-	-	-	-
2000	2040	2140	-	-	2182	2168	2230	-	-	-	-	-	-	-
2200	2240	2340	-	-	2384	2378	-	-	-	-	-	-	-	-
2400	2440	2540	-	-	2594	-	-	-	-	-	-	-	-	-
2600	2650	2750	-	-	2794	-	-	-	-	-	-	-	-	-
2800	2870	2970	-	-	3014	-	-	-	-	-	-	-	-	-
3000	3080	3180	-	-	3228	-	-	-	-	-	-	-	-	-

- Flanges compliant with the standard not available

Dimensions in mm

1) Specify material when placing order
2) The thickness of the metal ring is approx. 1.5 mm at ⌀< 150mm, otherwise approx. 1.2 mm

For flanges in accordance with ANSI B16.5

NPS	d_1	d_2	Class d_3						
			150	300	400	600	900	1500	2500
½	21	35	44,4	50,8	50,8	50,8	60,3	60,3	66,7
¾	27	43	53,9	63,5	63,5	63,5	66,7	66,7	73,0
1	33	51	63,5	69,8	69,8	69,8	76,3	76,3	82,5
1¼	42	64	73,0	79,4	79,4	79,4	85,7	85,7	101,6
1½	48	73	82,5	92,1	92,1	92,1	95,2	95,2	114,3
2	60	92	101,6	108,0	108,0	108,0	139,7	139,7	142,8
2½	73	105	120,6	127,0	127,0	127,0	161,9	161,9	165,1
3	89	127	133,4	146,1	146,1	146,1	165,1	174,5	193,7
3½	102	140	158,8	161,9	158,7	158,7	-	-	-
4	114	157	171,5	177,8	174,6	190,5	203,2	206,4	231,7
5	141	186	193,7	212,7	209,5	238,1	244,5	250,8	276,2
6	168	216	219,1	247,7	244,5	263,5	285,8	297,4	314,3
8	219	270	276,2	304,8	301,6	317,5	355,6	349,3	384,1
10	273	324	336,5	358,8	355,6	396,9	431,8	431,8	473,0
12	324	381	406,4	419,1	415,9	454,0	495,3	517,5	546,1
14	356	413	447,7	482,6	479,4	488,9	517,5	574,7	-
16	406	470	511,2	536,6	533,4	561,9	571,5	638,1	-
18	457	535	546,1	593,7	590,5	609,6	636,0	701,7	-
20	510	585	603,2	650,9	644,5	679,5	695,3	752,4	-
22	559	641	657,2	701,7	698,5	730,3	-	-	-
24	610	690	714,4	771,5	765,2	787,4	835,0	898,5	-

- Flanges compliant with the standard not available

Dimensions in mm

1) Specify material when placing order
2) The thickness of the metal ring is approx. 1.5 mm at ⌀< 150mm, otherwise approx. 1.2 mm

SALMARCON METAL JACKETED GASKETS

Metal Jacketed gaskets are the most basic type of semi-metallic gaskets combining the high pressure suitability and blow out resistance of metallic materials with the improved compressibility of soft materials. Metal jacketed gaskets offer an economical seal where sealing faces are narrow and can be produced in a variety of shapes, making them a good option for heat exchanger jointing.

Metal Jacketed and corrugated gaskets can be manufactured to suit a range of chemical environments by the selection of a suitable alloy jacket or core.

General Properties

- Economical
- Easy to handle and install
- Suitable for high temperatures
- Suitable for narrow flanges
- Good blow-out resistance

Applications

- Heat exchangers
- Exhaust gases
- Valve bonnet gaskets
- Narrow flanges

Gasket limiting values

Profiles			F2 to F17				Fw3	F3L
Materials			Aluminium Graphite	Copper Brass Graphite	Iron Nickel Graphite	Stainlesssteel Graphite	Iron Nickel Graphite	Iron Iron
Recommended max. roughness (R_z) of the flange surfaces	µm	from	25	12,5	6,3	2,5	6,3	6,3
		to	50	25	12,5	6,3	12,5	12,5
Surface pressure limits for 20 °C	N/mm²	σ_v	30	60	70	100	60	200
		σ_θ	100	150	180	250	180	500
Surface pressure limits for 300 °C	N/mm²	σ_v	(40)	70	80	115	70	200
		σ_θ	(60)	120	150	200	150	350

1) Fibre sheets with binder

Gasket profiles

Profile	Cross-section
F2	
F3	
F4	
F8	
F10	
F12	
F17	
FW3	

Metal - jacketed gaskets dimensions for ASME B 16.5 flange

NPS (in)	d (mm)	D (mm)						
	Class (lb)	150	300	400	600	900	1500	2500
1/2"	23.8	44.5	50.8	50.8	50.8	60.4	60.4	66.8
3/4"	31.8	54	63.5	63.5	63.5	66.7	66.7	73.1
1"	36.5	63.5	69.9	69.9	69.9	76.2	76.2	82.5
1 1/4"	46	73	79.4	79.4	79.4	85.8	85.8	101.6
1 1/2"	52.4	82.6	92.1	92.1	92.1	95.3	95.3	114.3
2"	73.2	101.6	108	108	108	139.7	139.7	143
2 1/2"	85.9	120.6	127	127	127	161.9	161.9	165.1
3"	107.8	133.4	146.1	146.1	146.1	165.1	171.5	193.8
4"	131.8	171.5	177.8	174.7	190.5	203.2	206.5	231.9
5"	152.4	193.8	212.8	209.5	238.2	244.6	250.9	276.3
6"	190.5	219.1	247.7	244.5	263.6	285.8	279.4	314.5
8"	238.3	276.3	304.8	301.7	317.5	355.6	349.3	384.3
10"	285.8	336.6	358.8	355.6	396.9	431.8	431.8	473.2
12"	342.9	406.4	419.1	415.9	454.1	495.3	517.6	546.1
14"	374.7	447.7	482.6	479.5	489	517.6	574.7	
16"	425.5	511.2	536.6	533.4	562	571.5	638.2	
18"	489	546.1	593.7	590.6	609.6	635	701.8	
20"	533.4	603.3	650.9	644.5	679.5	695.5	752.5	
24"	641.4	714.4	771.6	765.3	787.4	835.1	898.6	

Metal - jacketed gaskets dimensions for ASME B 16.47 Series A raised face flanges

NPS (in)	d (mm)	D (mm)				
	Class (lb)	150	300	400	600	900
26"	673.1	771.6	831.8	828.8	863.6	879.6
28"	723.9	828.8	895.3	889	911.3	943.1
30"	774.7	879.6	949.4	943.1	968.5	1006.6
32"	825.5	936.7	1003.3	1000.2	1019.3	1070.1
34"	876.3	987.5	1054.1	1051	1070.1	1133.6
36"	927.1	1044.7	1114.7	1114.5	1127.2	1197.1
38"	977.9	1108.2	1051	1070.1	1101.8	1197.1
40"	1028.7	1159	1111.2	1124	1152.6	1248
42"	1079.5	1286.1	1162	1174.7	1216.1	1298.7
44"	1130.3	1273.3	1216.1	1228.8	1267	1365.2
46"	1181.1	1324.1	1270	1286	1324.1	1432
48"	1231.9	1381.2	1320.8	1343.1	1387.6	1482.8
50"	1282.7	1432	1374.9	1400.3	1444.7	
52"	1333.5	1489.2	1425.7	1451.1	1495.5	
54"	1384.3	1546.3	1489.2	1514.6	1552.7	
56"	1431.1	1603.5	1540	1565.4	1603.5	
58"	1485.9	1660.6	1590.8	1616.2	1660.6	
60"	1536.7	1711.4	1641.6	1679.7	1730.5	

TOLERANCES (mm)

	up to 24"	above 24"
D	+ 1.58	+ 3.3
	0	0
d	+ 1.58	+ 3.3
	0	0
s	+ 0.8	+ 0.8
	0	0

GASKET ORDERING EXAMPLE

STANDARD DIMENSION:
Metal-jacketed gasket MP 10,
ASME B 16.5, 8"-600lbs,
Material: AISI 304,
Filler: Graphite

NON-STANDARD DIMENSION:
Metal-jacketed gasket MP 10,
D = 836 mm, d = 804 mm, s = 3,2 mm
Material: Cu,
Filler: Ceramic

SALMARCON RUBBER STEEL GASKETS

KLINGER KGS rubber-steel seals, the unique and patented adjustable seal KLINGER KGS VD and our KLINGER wall collar offer reliable sealing in water supply and disposal, in plant construction, in gas supply and in building protection. Excellent at high flange and screw forces, which can now be absorbed, so that reliable function is guaranteed with large dimensions.

Rubber-metal-gaskets are used where safe sealing of conventional up to special industrial media such as gases and liquids are required under usual installation conditions like temperatures, pressures, and forces.

Base: Vulcanized rubber mixture, lens-form, rounded at the edges, vulcanized steel ring inside, therefore good reception of the surface load. Outer diameter self-centering at the inner bolt circle.

Advantages & properties

- Self-centering with the same flange DN and PN
- Appropriate tightening torques
- Self-limiting compression surface
- Rigid gasket, easy to install
- Soft surface in order to seal slightly damaged flange surfaces
- Materials of KLINGER®KGS: NR, NBR, EPDM, CSM, FKM
- Dimensions according to EN 1514-1 depending on DN: PN 6 to PN 40 / DN 15 up to DN 2000

Materials of rubber-metal-gaskets

Materials	NR	NBR	EPDM	VITON/FKM
Field of application	Water Circuit water Diluted alkalis up to max. 50% and max. 80%	Gas Media containing hydrocarbon Waste water Water	Drinking water waste water process water, on consultation	Application in case of higher temperatures
Colour	Black	Black	Black	Black
Temperature	approx. +80°C short-term up to +90°C	from -15°C to +100°C	from -40°C to +100°C short-term up to +130°C	from -20°C to +200°C
Certificates	EN 681 - 1 WC Class 70	DVGW Certificate acc. to EN 682 GBL EN 681-1 WG Class 70 EN 682 GBL Class 70 TA-Luft (German Clean Air Act)	EN 681-1 WAL/WCL Class 70 Elastomer Guideline (new KTW) DVGW W270, ACS, WRAS (Bs6920) FDA Certifcate, TA-Luft	TA-Luft (German Clean Air Act)
Applications	NR vulcanized materials can be used where noncritical media have to be sealed. Higher temperatures than 90°C have to be avoided.	Application of NBR vulcanized materials result from the listed characteristics, such as resistance against aliphatic carbohydrates, mineral oils, greases fuels.	Application of EPDM vulcanized materials mainly result from the good resistance to chemicals. Furthemore, the EPDM quality has good resistance against ozone and aging.	Due to the good resistance against acids and alkalis, the main use is in the area of chemistry and their users.

DN	Inside diameter	Outside diameter for PN						
		1 / 2.5	6	10	16	25	40	63
10	18	39	39	46	46	46	46	56
15	22	44	44	51	51	51	51	61
20	27	54	54	61	61	61	61	72
25	34	64	64	71	71	71	71	82
32	43	76	76	82	82	82	82	88
40	49	86	86	92	92	92	92	103
50	61	96	96	107	107	107	107	113
60	72	106	106	117	117	117	117	123
65	77	116	116	127	127	127	127	138
80	89	132	132	142	142	142	142	148
100	115	152	152	162	162	168	168	174
125	141	182	182	192	192	194	194	210
150	169	207	207	218	218	224	224	247
200	220	262	262	273	273	284	290	309
250	273	317	317	328	329	340	352	364
300	324	373	373	378	384	400	417	424
350	356	423	423	438	444	457	474	486
400	407	473	473	489	495	514	546	543
450	458	528	528	539	555	564	571	–
500	508	578	578	594	617	624	628	–
600	610	679	679	695	734	731	747	–
700	712	784	784	810	804	833	–	–
800	813	890	890	917	911	942	–	–
900	915	990	990	1017	1011	1042	–	–
1000	1016	1090	1090	1124	1128	1154	–	–
1100	1120	–	–	1231	1228	1251	–	–
1200	1220	1290	1307	1341	1342	1364	–	–
1400	1420	1490	1524	1548	1542	1578	–	–
1500	1520	–	–	1658	1654	1688	–	–
1600	1620	1700	1724	1772	1764	1798	–	–
1800	1820	1900	1931	1972	1964	2000	–	–
2000	2020	2100	2138	2182	2168	2230	–	–
2200	2220	2307	2348	2384	–	–	–	–
2400	2420	2507	2558	2592	–	–	–	–
2600	2620	2707	2762	2794	–	–	–	–
2800	2820	2924	2972	3014	–	–	–	–
3000	3020	3124	3172	3228	–	–	–	–
3200	3220	3324	3382	–	–	–	–	–
3400	3420	3524	3592	–	–	–	–	–
3600	3620	3734	3804	–	–	–	–	–
3800	3820	3931	–	–	–	–	–	–
4000	4020	4131	–	–	–	–	–	–

SALMARCON CUSTOM MADE AND SPECIALTY GASKETS

At Salmarcon with our own technology, knowledge and experience we are capable of meeting various customer needs.
In close co-operation with customers, we develop and produce special types of gaskets for various applications. Gaskets are produced up to a size of 7000 mm in different special types for the most demanding applications in almost any industry.

Custom-made gaskets are made to customer's own drawing and specification, samples, and templates.
Our skilled team can provide the solution for almost any customer requirements.

Advantages

- Custom made gaskets according to customers specifications.
- Special large single piece gaskets up to 7000 mm in size.
- Unique and strong construction allows easy handling and transport.
- High temperature resistance depends on material. However, as we have a wealth of materials we can comply
- Capability to compensate for irregularities on flanges.

Salmarcon Endüstriyel San. Ve Tic. A.Ş.
Merkez/Fabrika (Center/Factory):
Çanakkale Organize Sanayi Bölgesi,
Karacaören Mevkii ,2. Cadde No.6
17100 ÇANAKKALE/TÜRKİYE

Satış Ofisi (Sales Office):
Fahrettin Kerim Gökay Cad.
Dolmabahçe Sok. Cebeci Apt.B Blok No.21/A
34732 Göztepe/İSTANBUL/TÜRKİYE

+90 444 82 19
+90 216 602 14 00

info@salmarcon.com
www.salmarcon.com