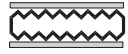
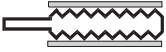


LEADER CAM Camprofile Gaskets

LEADER CAM camprofile gaskets are offered as a high quality sealing alternative. Their application is for difficult sealing environments where performance is critical or where sealing stresses are low. **LEADER CAM** gaskets consist of a metal core with concentric grooves and normally have sealing layers of either flexible graphite or PTFE. Gaskets can be applied without sealing covers, but there is the risk of flange damage at high seating loads. Metal cores are usually selected based on the metallurgy of the piping system and can be relaminated with new covers (sealing layers) to give virtually endless uses. This can be most interesting in applications using expensive alloys. The following presents the two types of profiles available.

LG-411 This profile is grooved and has covers from the ID to the OD. Its uses are similar to the spiral wound gasket profile LG-11. It is designed for tongue and groove and male/female flanges.

LG-413 This profile has a section that performs as a guide ring in a LG-13 spiral wound gasket. It is designed for raised and flat faced flanges. The OD normally extends to the surface of the bolts.

Profile	Cross Section
LG-411	
LG-413	

Advantages of the LEADER CAM Gasket

- ▶ Excellent sealing characteristics at a wide range of seating stresses
- ▶ Helps compensate for wide swings of temperature and pressure
- ▶ Very forgiving of inconsistent bolt torquing or installation error
- ▶ Applicable to almost all types of flanges regardless of available bolt loads
- ▶ The working thickness of sealing layers is extremely small reducing fugitive emissions
- ▶ Low seating stresses reduce flange damage and gasket removal problems
- ▶ The gasket cores are reusable reducing cost and eliminating gasket proposal problems
- ▶ Extreme temperature and chemical resistance due to variety of materials available.

Gasket Factor and Design Seating Stress Table

	Types of Covers	
	Graphite	PTFE
Profiles LG-411 and LG-413		
Gasket factor m	3,75/4,25	3,75/4,25
Seating Stress y (psi)		
Minimum (carbon steel)	7 600	7 600
Maximum (carbon steel)	10 100	10 100

Leader Gasket

Section 02

Available Alloys

Graphite Graphite covers are the most common type for camprofile gaskets. They can be used in almost all applications and temperatures save certain fuming acids. Leader Gasket uses only quality graphite from the market leaders in the United States and Europe.

PTFE PTFE covers are used in applications where graphite is not acceptable. It is common with acids and other corrosive mediums.

Typically, the covers for camprofile gaskets are 0.5 mm for the type A groove and 0.8 to 1.0 mm for the larger type B groove.

Available Alloys

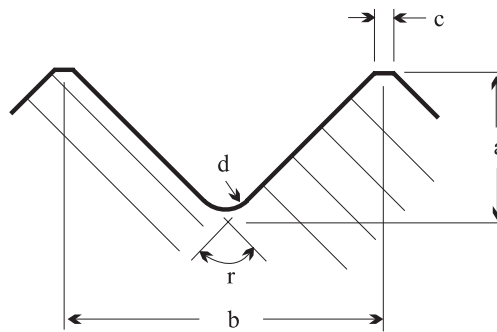
Leader Gasket offers camprofile gaskets made from the common alloys. The table below presents the alloys available (in both ANSI and DIN nomenclature)

AISI	DIN
304	1.4301
316L	1.4404
316Ti	1.4571
321	1.4541
304L	1.4306
Alloy 20	C
Carbon Steel	St 37
Hastelloy B2	2.4615
Hastelloy C276	2.4819
Inconel 600	2.4816
Monel 400	2.4360
Incoloy 800	1.4876
Incoloy 825	2.4858
Titanium	3.7025

Groove Types

There are two types of grooves available for camprofile gaskets, type A and type B. The

following drawing and table presents the dimensional data for the two types.



Dimensions in mm and (and degrees for r)

	a	b	c	d	r
Type A	0.50	1.00	0.10	0.3	90
Type B	0.75	1.50	0.10	0.3	90

Type B profile is only suited for metal cores 4 mm and greater due to the depth of the groove.

Dimensions

The following table and the side figure show the dimensions required to specify a **LEADER CAM** gasket.

Profile	Dimensions Required	Total Number
LG-411	d1 & d2	2
LG-413	d1, d2 & d3	3

Camprofiled ribs can also be included as necessary for heat exchanger style gaskets. See section 3.0 Jacketed Gaskets for typical shapes of heat exchanger gaskets.

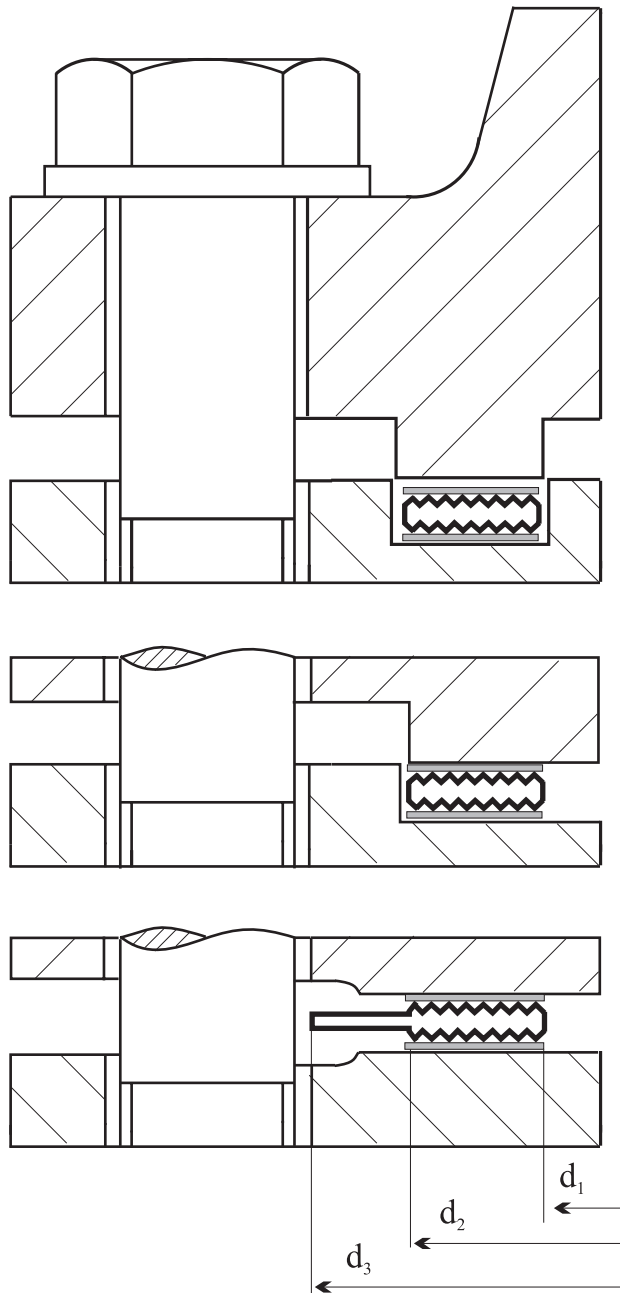
Section 02

Leader Gasket

Ordering Information

In addition to dimensions, the following information is required when placing an order for **LEADER CAM** camprofile gasket.

- 1) Profile type (A or B)
- 2) Steel material for the core (1.4541, etc.)
- 3) Type of covers (graphite or PTFE)
- 4) Thickness of the core
- 5) Thickness of the covers
- 6) Size (either standard or special) or dimensions

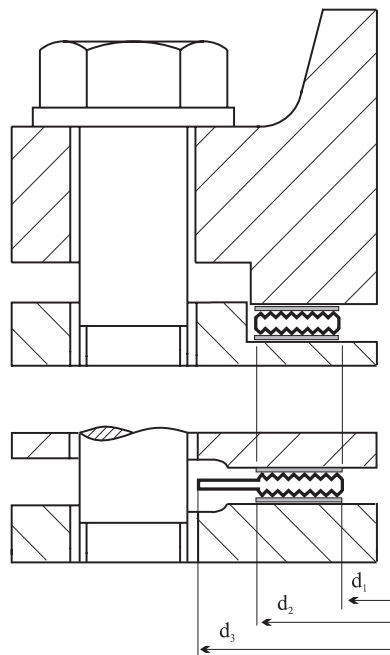


Leader Gasket

Section 02

Dimension Table 2.01

For Raised Faced and Male/Female DIN Flanges from DN 10 to 600 mm
Profiles: LG-411 and LG-413

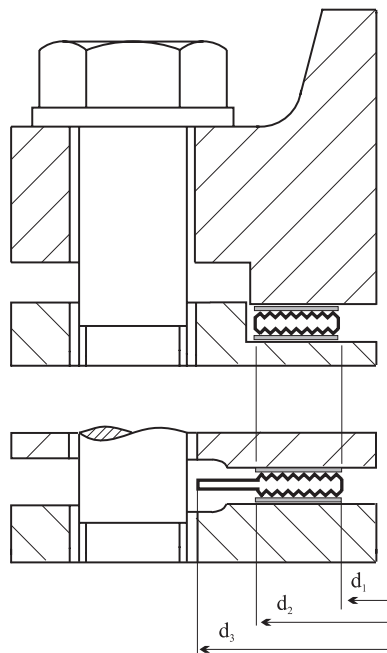


Dimensions in mm

DN	d ₁	d ₂	d ₃ for PN									
			10	16	25	40	64	100	160	250	320	400
10	22	36	46	46	46	46	56	56	56	67	67	67
15	26	42	51	51	51	51	61	61	61	72	72	78
20	31	47	61	61	61	61	-	-	-	-	-	-
25	36	52	71	71	71	71	82	82	82	83	92	104
32	46	66	82	82	82	82	-	-	-	-	-	-
40	53	73	92	92	92	92	103	103	103	109	119	135
50	65	87	107	107	107	107	113	119	119	124	134	150
65	81	103	127	127	127	127	137	143	143	153	170	192
80	95	121	142	142	142	142	148	154	154	170	190	207
100	118	144	162	162	168	168	174	180	180	202	229	256
125	142	176	192	192	194	194	210	217	217	242	274	301
150	170	204	217	217	224	224	247	257	257	284	311	348
175	195	229	247	247	254	265	277	287	284	316	358	402
200	224	258	272	272	284	290	309	324	324	358	398	442
250	275	315	327	328	340	352	364	391	388	442	488	-
300	325	365	377	383	400	417	424	458	458	536	-	-
350	375	420	437	443	457	474	486	512	-	-	-	-
400	426	474	489	495	514	546	543	572	-	-	-	-
450	480	528	539	555	-	571	-	-	-	-	-	-
500	530	578	594	617	624	628	657	704	-	-	-	-
600	630	680	695	734	731	747	764	813	-	-	-	-

Dimension Table 2.02

For Raised Faced and Male/Female DIN Flanges from DN 700 to 3000 mm
 Profiles: LG-411 and LG-413



Dimensions in mm

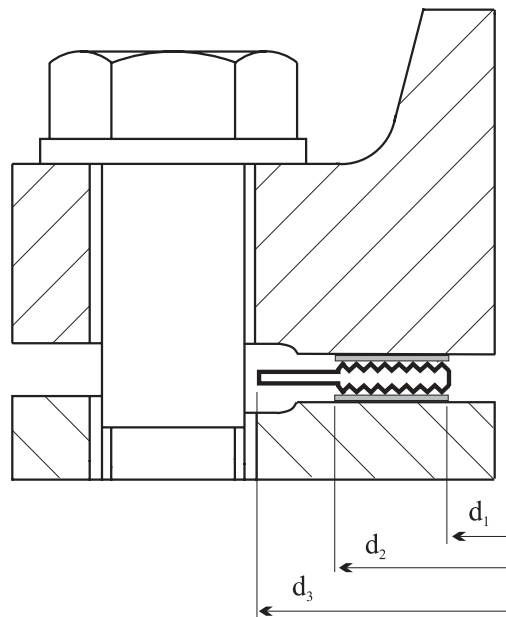
DN	d ₁	d ₂	d ₃ for PN					
			10	16	25	40	64	100
700	730	780	810	804	833	852	879	950
800	830	880	917	911	942	974	988	-
900	930	980	1017	1011	1042	1084	1108	-
1000	1040	1090	1124	1128	1154	1194	1220	-
1200	1250	1310	1341	1342	1364	1398	1452	-
1400	1440	1510	1548	1542	1578	1618	-	-
1600	1650	1730	1772	1764	1798	1830	-	-
1800	1850	1930	1972	1964	2000	-	-	-
2000	2050	2130	2182	2168	2230	-	-	-
2200	2250	2340	2384	2378	-	-	-	-
2400	2460	2550	2594	-	-	-	-	-
2600	2670	2760	2794	-	-	-	-	-
2800	2890	2980	3014	-	-	-	-	-
3000	3100	3190	3228	-	-	-	-	-

Leader Gasket

Section 02

Dimension Table 2.03

For Raised Faced ASME B16.5 Flanges
Profiles: LG-413



Dimensions in mm

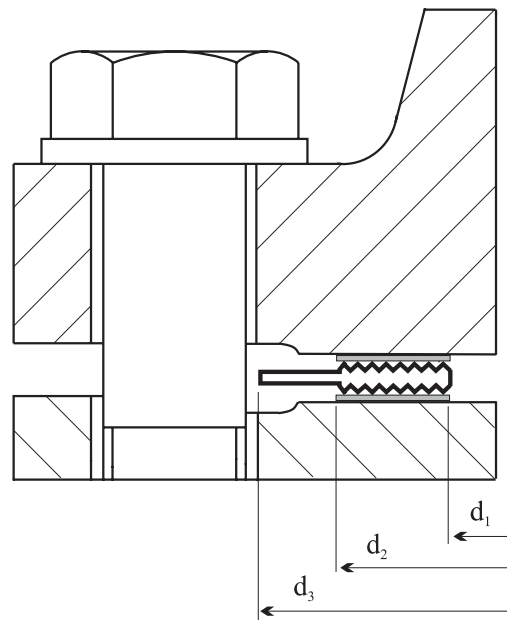
DN (in.)	d ₁	d ₂	d ₃ for PN (psi)						
			150	300	400	600	900	1500	2500
1/2	23,0	33,3	44,4	50,8	50,8	50,8	60,3	60,3	66,7
3/4	28,6	39,7	53,9	63,5	63,5	63,5	66,7	66,7	73,0
1	36,5	47,6	63,5	69,8	69,8	69,8	76,2	76,2	82,5
1 1/4	44,4	60,3	73,0	79,4	79,4	79,4	85,7	85,7	101,6
1 1/2	52,4	69,8	82,5	92,1	92,1	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	396,9	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	-

Section 02

Leader Gasket

Dimension Table 2.04

For Raised Faced MSS SP44 Flanges
Profiles: LG-413



Dimensions in mm

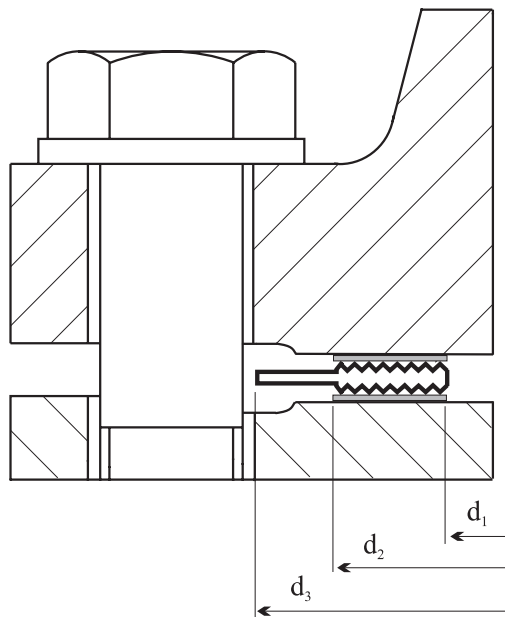
DN (in.)	d ₁	d ₂	d ₃ for PN (psi)				
			150	300	400	600	900
26	690	740	772	832	829	864	880
28	740	790	829	895	889	911	943
30	800	850	880	949	943	968	1007
32	845	905	937	1003	1000	1019	1070
34	895	955	987	1054	1051	1070	1134
36	950	1010	1045	1114	1114	1127	1197
38	960	1020	1108	1051	1070	1102	1197
40	1015	1075	1159	1111	1124	1153	1248
42	1065	1125	1216	1162	1175	1216	1299
44	1125	1185	1273	1216	1229	1267	1365
46	1175	1235	1324	1270	1286	1324	1432
48	1220	1290	1381	1321	1343	1388	1483
50	1270	1350	1432	1375	1400	1445	-
52	1320	1400	1489	1426	1451	1495	-
54	1375	1455	1546	1489	1515	1553	-
56	1430	1510	1603	1540	1565	1610	-
58	1485	1565	1661	1591	1616	1661	-
60	1535	1615	1711	1642	1680	1730	-

Leader Gasket

Section 02

Dimension Table 2.05

For Raised Faced Flanges per DIN 2697
Profiles: LG-413



Dimensions in mm

DN	d ₁	d ₂	d ₃ for PN (bar)					
			64	100	160	250	320	400
10	22	40	-	-	56	-	-	67
15	25	45	-	-	61	-	72	77
25	36	68	-	-	-	82	92	103
40	50	88	-	-	102	108	118	135
50	62	102	112	-	118	123	133	150
65	74	122	137	-	143	153	170	192
80	90	138	147	-	153	170	190	207
100	115	162	173	-	180	202	229	256
125	142	188	210	-	217	242	274	301
150	165	218	247	-	257	284	311	348
175	190	260	277	287	284	316	358	-
200	214	285	309	-	324	358	398	442
250	264	345	364	391	388	442	488	-
300	310	410	424	-	458	-	-	-
350	340	465	486	512	-	-	-	-
400	386	535	543	-	-	-	-	-

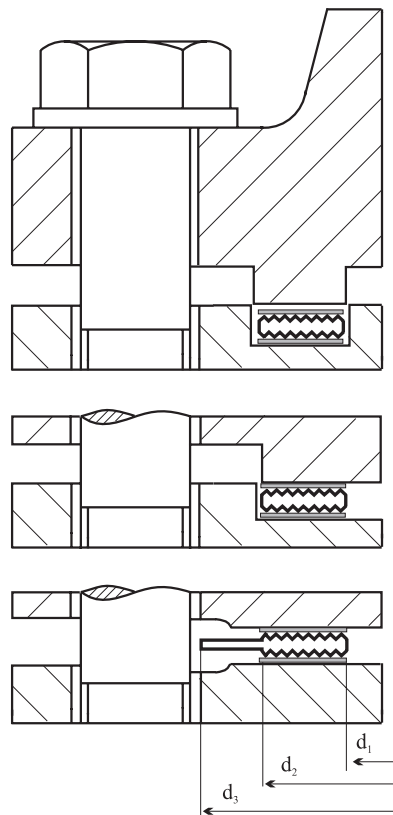
Calculation coefficients according DIN 2505

Profile	Cover Material	$K_0 * K_0$ [N/mm]	K_1 [mm]	R_z [um]
LG-411	Graphite	15 b ₀	1,0 b ₀	25 to 50
	PTFE	15 b ₀	1,0 b ₀	50 to 100
LG-413	N/A	15 b ₀	1,0 b ₀	25 to 50

R_z - recommended max. peak - to - valey height - flange roughness

N/A - nonasbestos material

Coefficients are valid for standard, convex profile and solid or floating ring construction



Camprofile Gaskets - Tolerances

Size		Diameter	Diameter	Diameter	Thickness
		d1	d2	d3	
		Tolerance	Tolerance	Tolerance	Tolerance
mm	inch	mm	mm	mm	mm
Up to 600	Up to 24	+0,4/-0,4	+0,4/-0,4	+0/-0,4	+0/-0,25
600 to 800	24 to 32	+0,8/-0,8	+0,8/-0,8	+0/-0,8	+0/-0,25
800 to 1600	32 to 60	+1,2/-1,2	+1,2/-1,2	+0/-1,2	+0/-0,4