


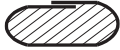









### Metallic Jacketed Gaskets

Jacketed gaskets are widely used in a diverse range of industries and applications. Leader Gasket manufactures a complete line of jacketed gaskets in virtually any size and combination of metallic and non-metallic materials. Diameters larger than commercially available metal sheets are manufactured using special welding techniques. Custom orders are welcomed as well as orders complying to API, DIN, and other common standards. Shapes other than round such as ovals, pears, and squares are also available. The following profile descriptions present Leader Gasket's product line of jacketed gaskets.

**LG-20** The single jacketed gasket is most commonly used when a narrow width gasket cross section is required. They are made by encasing a soft filler with a single piece of metal. This design provides for the protection of both edges of the soft gasket material. Most single jackets are made of copper and have cross sections less than 6 mm. For cross sections greater than 6 mm, double jacketed gaskets are recommended.

**LG-20-CR** This gasket is similar to the LG-20, however the single piece of metal is shaped such as to provide for the complete enclosure of the soft filler. The maximum flange width for this gasket is also 6 mm.

**LG-23** This gasket is a double jacketed profile made from two pieces of metal and a soft filler. It is the most commonly used profile for heat exchangers and other vessels. The LG-23 has greater compressibility and resilience than a solid metal gasket due to the enclosure of the soft filler. The two piece metal construction also provides extra rigidity allowing for large diameters.

Profile	Cross Section
LG-20	
LG-20-CR	
LG-23	
LG-26	
LG-29	
LG-30	
LG-31	
LG-40	
LG-00	
LG-00-CD	
LG-05	

**LG-40** This gasket is solid piece of metal with soft gasket material covers. The covers are typically graphite or PTFE. It is similar to a camprofile gasket without grooves.

### Ordering Information

The following information should be supplied to Leader Gasket when ordering jacketed gaskets:

1. Outside diameter
2. Inside diameter
3. Thickness
4. Shape per index chart
5. Profile number
6. Materials (metal and filler)
7. Rib size

8. Distance from centerline of gasket to centerline of ribs
9. Welded or one piece construction

### Welded or One Piece Construction

Leader Gasket can manufacture gaskets either using welded construction or from one piece construction techniques. Welded construction is often required for larger sizes and is sometimes more economical due to reduced material consumption.

*Gasket Factors and Minimum Design Seating Stress Table*

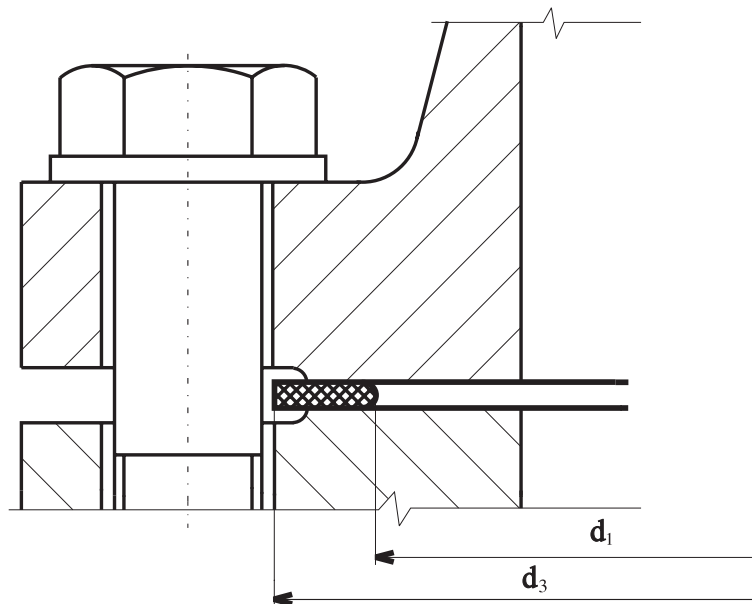
	Type of Metal Utilized for Jacket					
	Soft Aluminium	Soft Copper or Brass	Iron or Soft Steel	Monel	4-6% Chrome	Stainless Steels
Profiles 20 to 23 and 30 to 32						
Gasket factor m	3.25	3.50	3.75	3.50	3.75	3.75
Min. design seating stress y (psi)	5500	6500	7600	8000	9000	9000
Profile 00						
Gasket factor m	2.75	3.00	3.25	3.5	3.5	3.75
Min. design seating stress y (psi)	3700	4500	5500	6500	6500	7600
Profiles 00-CD and 26						
Gasket factor m	2.5	2.75	3.00	3.25	3.25	3.5
Min. design seating stress y (psi)	2900	3700	4500	5500	5500	6500

# Leader Gasket

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**Dimension Table 3.01**

For Raised Faced Flanges per ASME B 16.5  
Profiles: LG-23 and LG-00



Dimensions in mm

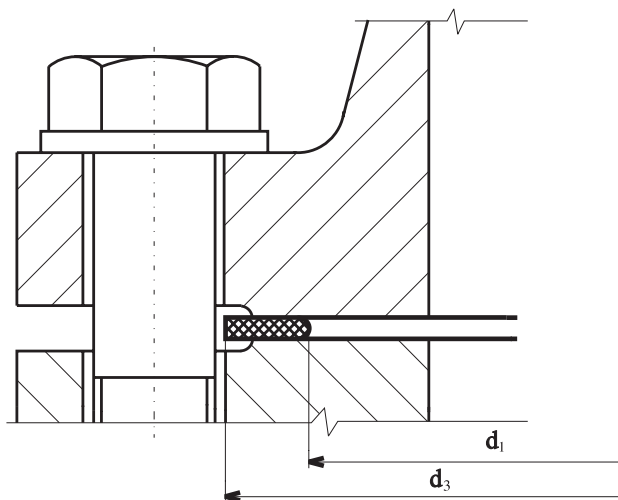
DN (inch)	Contact Width	d <sub>1</sub> (mm)	d <sub>2</sub> (mm)						
			150 psi	300 psi	400 psi	600 psi	900 psi	1500 psi	2500 psi
1/2	5,0	25	47	53	53	53	63	63	69
3/4	5,0	33	57	66	66	66	69	69	76
1	5,0	38	66	73	73	73	79	79	85
1 1/4	8,0	47	76	82	82	82	88	88	104
1 1/2	9,5	54	85	95	95	95	98	98	117
2	9,5	73	104	111	111	111	142	142	146
2 1/2	9,5	86	123	130	130	130	165	165	168
3	9,5	108	136	149	149	149	168	174	196
3 1/2	10,0	120	161	165	161	161	-	-	-
4	12,5	132	174	180	177	193	206	209	234
5	13,0	160	196	215	212	241	247	254	279
6	16,0	190	222	250	247	266	288	282	317
8	16,0	238	279	307	304	320	358	352	387
10	19,0	286	339	361	358	400	434	434	476
12	19,0	343	409	422	419	457	498	520	549
14	19,5	374	450	485	482	492	520	577	-
16	22,5	425	514	539	536	565	574	641	-
18	22,5	489	549	596	593	612	638	704	-
20	25,5	533	606	654	647	682	698	755	-
22	25,5	587	660	704	701	733	-	-	-
24	25,5	641	717	774	768	790	838	901	-

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**Dimension Table 3.02**

For Raised Faced Flanges per DIN and BS 4504  
Profiles: LG-23, LG-26 and LG-31



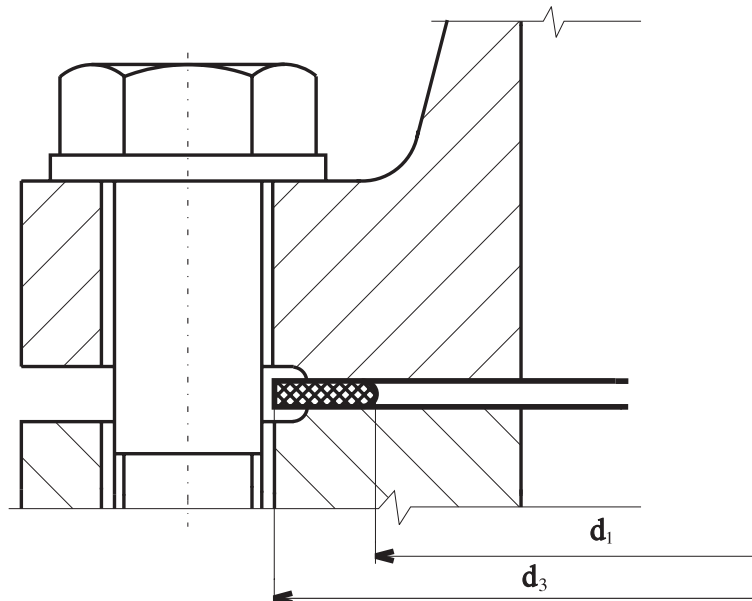
Dimensions in mm

DN	PN 10		PN 16		PN 25		PN 40		PN 64		PN 100	
	d <sub>1</sub>	d <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>
10	-	-	-	-	-	-	25	46	-	-	30	56
15	-	-	-	-	-	-	30	51	-	-	35	61
20	-	-	-	-	-	-	40	61	-	-	-	-
25	-	-	-	-	-	-	50	71	-	-	55	82
32	-	-	-	-	-	-	60	82	-	-	-	-
40	-	-	-	-	-	-	70	92	-	-	75	103
50	-	-	-	-	-	-	85	107	85	113	85	119
65	-	-	-	-	-	-	105	127	105	138	105	144
80	-	-	-	-	-	-	120	142	120	148	120	154
100	-	-	140	162	-	-	145	168	140	174	137	180
125	-	-	170	192	-	-	170	194	165	210	160	217
150	-	-	195	218	-	-	200	224	195	247	190	257
175	-	-	225	248	230	254	240	265	235	277	230	287
200	-	-	250	273	260	284	260	290	255	309	250	324
250	300	328	300	329	315	340	320	352	315	364	310	391
300	350	378	355	384	370	400	380	417	375	424	370	458
350	410	438	415	444	425	457	435	474	430	486	425	512
400	460	489	460	495	475	514	505	546	500	543	495	572
500	565	594	580	617	580	624	580	628	575	657	570	704
600	660	695	695	734	695	731	695	747	690	764	685	813
700	780	810	765	804	785	833	800	852	795	879	790	950
800	880	917	870	911	890	942	910	974	905	988	-	-
900	980	1017	970	1011	990	1042	1020	1084	1010	1108	-	-
1000	1080	1124	1085	1128	1100	1154	1130	1194	1120	1220	-	-
1200	1300	1341	1295	1342	1300	1364	1325	1398	1320	1425	-	-
1400	1500	1548	1495	1542	1510	1578	1545	1618	-	-	-	-
1600	1720	1772	1715	1764	1730	1798	1755	1830	-	-	-	-
1800	1920	1972	1910	1964	1930	2000	-	-	-	-	-	-
2000	2120	2182	2105	2168	2150	2230	-	-	-	-	-	-

# Leader Gasket

## Section 03

### Metallic Jacketed Gaskets - Tolerances



Gasket Outside Diameter		Inside	Outside
		Diameter	Diameter
		Tolerance	Tolerance
		d1	d2
mm	inch	mm	mm
Up to 150	Up to 6"	+0,8/-0	+0/-0,8
150-1500	6" to 60"	+1,6/-0	+0/-1,6
1500 and above	60" and above	+2,4/-0	+0/-2,4

Thickness: +0,4/-0,4 mm  
Radius: +1,6/-1,6 mm

Rib width: +0,4/-0,4 mm  
Rib location: +1,6/-1,6 mm

Calculation coefficients according DIN 2505

Profile	Material	$K_o * K_b$ [N/mm]	K1 [mm]	Rz [um]
LG-20	Al	50 $b_o$	1,4 $b_o$	25 to 50
LG-20-CR	Cu	60 $b_o$	1,6 $b_o$	12,5 to 25
LG-23	Ni	70 $b_o$	1,8 $b_o$	6,3 to 12,5

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

**Table of Jacketed Gasket Shapes**

1	31	32	41	42	51	52	53
54	61	62	63	71	72	73	74
75	76	77	78	79	81	82	83
84	85	86	87	88	89	91	92
93	94	95	96	97	98	99	101
102	103	104	105	106	107	111	112

**Welded and One Piece Construction**

