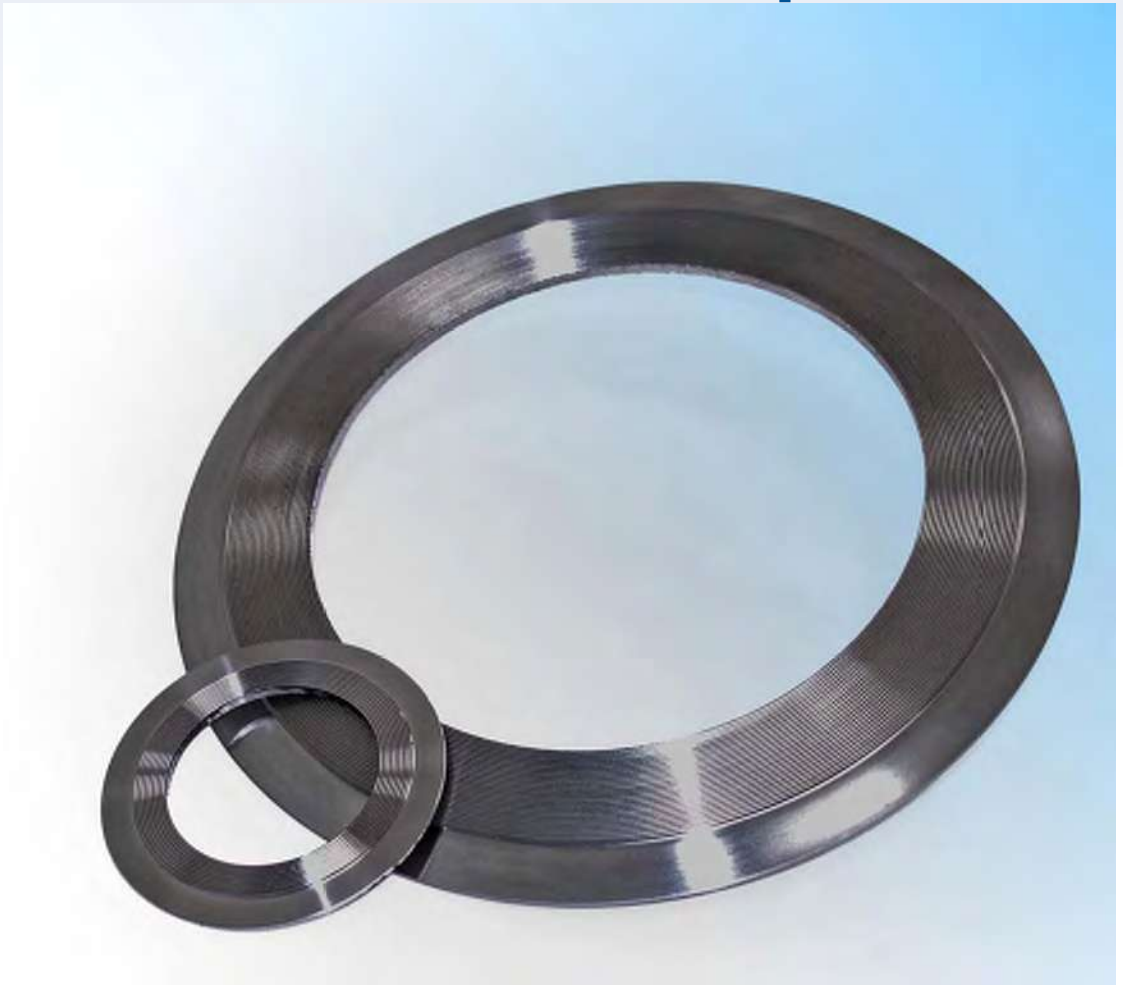
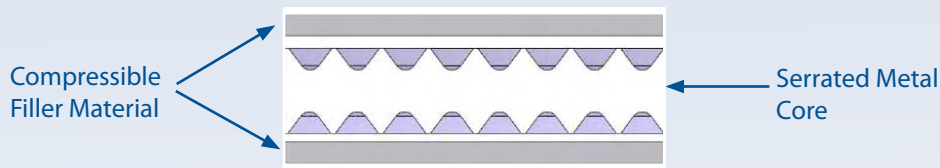


Maxiprofile

Metallic



The Klinger Maxiprofile is a composite gasket which utilises a serrated metal core with a soft facing material. The metal core is machined on each contact face with concentric serrations which provide high pressure areas, ensuring that the soft coating flows into any imperfections in the flange even at relatively low bolt loads. The result is a gasket which combines the benefits of soft cut materials with the advantages of seal integrity associated with metallic gaskets.



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

Facing Material	Maximum Temperature
Graphite	550°C
PTFE	260°C
Mica	1000°C
KLINGERSIL® C-4430	250°C

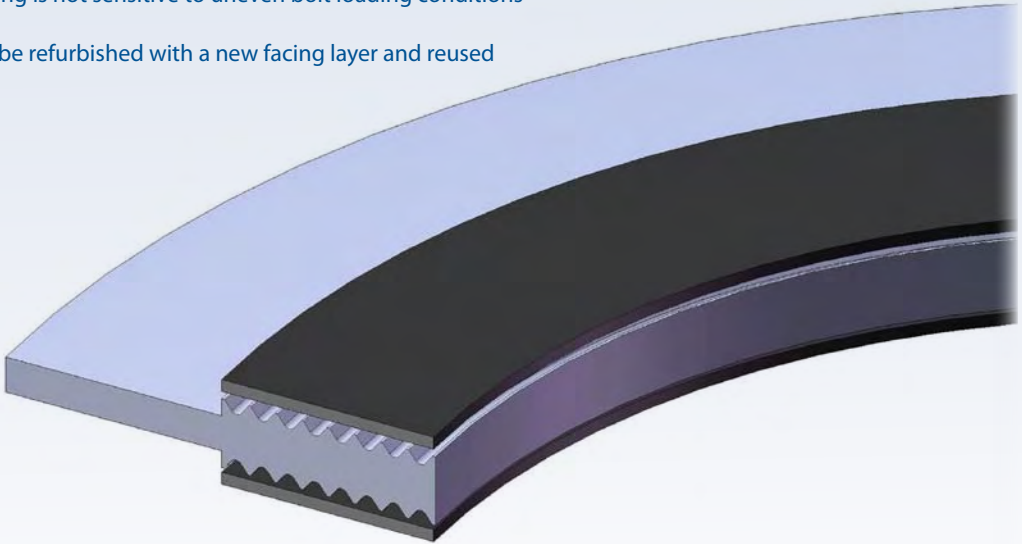
Maxiprofile gaskets can also be manufactured from a range of core materials according to media compatibility and temperature considerations.

Core Material	Maximum Temperature
316L Stainless Steel	800°C
304 Stainless Steel	650°C
Duplex UN S31803	800°C
347 Stainless Steel	870°C
321 Stainless Steel	870°C
Monel 400	800°C
Nickel 200	600°C
Titanium Gr 2	500°C
Hastelloy B-2/B-3	700°C
Hastelloy C-276	700°C

Core Material	Maximum Temperature
Inconel 600	1000°C
Inconel 625	1000°C
Incoloy 825	600°C
Zirconium	500°C
Super Duplex	600°C
254 SMO	600°C
Titanium Gr7	500°C
Hastelloy C-22	700°C
Hastelloy G-31	800°C
Alloy 20	600°C

General Properties of Maxiprofile Gaskets:

- A wide range of seating stresses under which the seal is effected and maintained
- Can be used 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 conditions
- Can be refurbished with a new facing layer and reused



Metallic

Applications of Maxiprofile Gaskets:

- Heat exchanger and vessel applications
- High and low temperatures
- Pressures of up to 250 bar
- Low bolt loads
- Narrow flange widths
- Damaged flanges

Core Design

Standard core design is parallel which offers the advantage of even stress distribution across the gasket face. Convex Maxiprofiles are also available which have a reduced depth of grooves towards the profile centre. This type of profile ensures a high seating stress in the middle of the profile and is effective for low bolt load applications.



Klinger Maxiprofile Type 109

Applications:

- Used for a wide range of applications including steam, oil, hydrocarbon and can also be tailored to suit more aggressive chemicals
- Used for applications requiring a high-integrity seal such as chlorine
- Especially suited to use in heat exchangers

Typical Properties:

- High pressure gasket with a wide seating stress range
- Excellent tightness even at low bolt loads
- Reusable metallic core can be refaced after service
- Available facings include: Graphite, PTFE, KLINGERSIL and Soft-chem

Typical Specifications:

Core material :	316L - 3.0, 4.0, 5.0mm
Facing material:	Graphite - 0.5mm
Facing density:	1 g/cm ³ (alternative 0.7g/cm ³)
Max. temperature :	550°C
Max. pressure	>400 bar
Suitability	For flanges to ASME B16.5, DIN standards and BS 10, can also be manufactured in custom sizes.

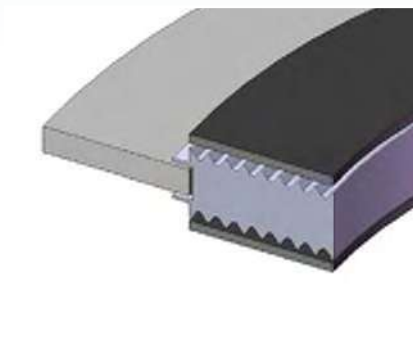
Style:	Description:
LA 1	Lateral profiled joint with guide ring for raised and flat face applications
LA 2	Lateral profiled joint without guide ring for male and female, tongue and groove and grooved flanges
LA 3	Lateral profiled joint with floating guide ring for raised and flat face applications
CA1, 2 & 3	Convex profiled joints in the same style as LA 1, 2 and 3. The convex profile is designed to assist sealing in low bolt load applications



Maxiprofile LA 1



Maxiprofile LA 2



Maxiprofile LA 3

Metallic cores are available in a wide range of metallic materials shown on page 62.

Klinger Maxitherm

Applications:

- Designed for use at high temperatures and to create a seal at low bolt loads.
- Especially suited to use in heat exchangers

Typical Properties:

- High pressure gasket with a wide seating stress range
- Excellent tightness even at low bolt loads
- Reusable metallic core can be refaced with mica after service

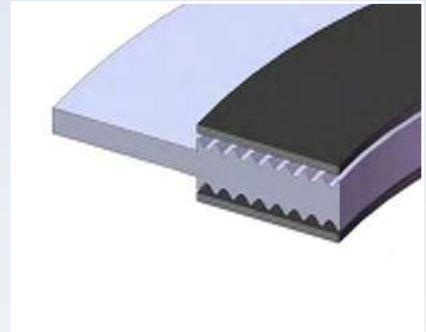
Typical Specifications:

Core material :	Inconel 600 - 3.0, 4.0 or 5.0mm
Facing material:	Mica - 0.5mm
Facing density:	1 g/cm ³ (alternative 0.7g/cm ³)
Max. temperature :	900°C.
Max. pressure	>40 bar.
Suitability	For flanges to ASME B16.5, DIN standards and BS 10, can also be manufactured in custom sizes.

Style:

Description:

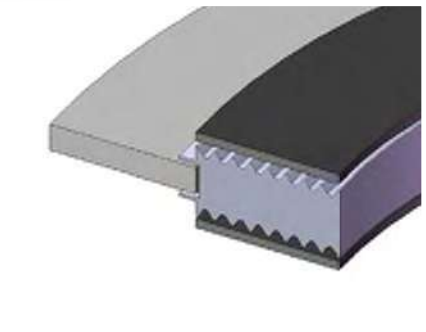
LA 1	Lateral profiled joint with guide ring for raised and flat face applications.
LA 2	Lateral profiled joint without guide ring for male and female, tongue and groove and grooved flanges.
LA 3	Lateral profiled joint with floating guide ring for raised and flat face applications.
CA1, 2 & 3	Convex profiled joints in the same style as LA 1, 2 and 3. The convex profile is designed to assist sealing in low bolt load applications.



Maxiprofile LA 1



Maxiprofile LA 2



Maxiprofile LA 3

Metallic cores are available in a wide range of materials shown on page 62.

Metallic

Dimensions for Maxiprofile Gaskets

Metallic



Dimensions to suit ANSI Standard Flanges

Class 150 ASME B16.20

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
1/2"	48 x 33 x 23	3 "	137 x 124 x 98	14 "	451 x 410 x 372
3/4"	57 x 40 x 29	4 "	175 x 154 x 124	16 "	514 x 467 x 422
1 "	67 x 48 x 37	5 "	197 x 183 x 151	18 "	549 x 530 x 479
1 1/4"	76 x 60 x 44	6 "	222 x 213 x 178	20 "	606 x 581 x 530
1 1/2"	86 x 70 x 52	8 "	279 x 267 x 229	24 "	718 x 683 x 632
2 "	105 x 89 x 70	10 "	340 x 321 x 283		
2 1/2"	124 x 102 x 83	12 "	410 x 378 x 340		

Class 300 ASME B16.20

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
1/2"	54 x 33 x 23	3 "	149 x 124 x 98	14 "	486 x 410 x 372
3/4"	67 x 40 x 29	4 "	181 x 154 x 124	16 "	540 x 467 x 422
1 "	73 x 48 x 37	5 "	216 x 183 x 151	18 "	597 x 530 x 479
1 1/4"	83 x 60 x 44	6 "	251 x 213 x 178	20 "	654 x 581 x 530
1 1/2"	95 x 70 x 52	8 "	308 x 267 x 229	24 "	775 x 683 x 632
2 "	111 x 89 x 70	10 "	362 x 321 x 283		
2 1/2"	130 x 102 x 83	12 "	422 x 378 x 340		

Class 600 ASME B16.20

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
1/2"	54 x 33 x 23	3 "	149 x 124 x 98	14 "	492 x 410 x 372
3/4"	67 x 40 x 29	4 "	194 x 154 x 124	16 "	565 x 467 x 422
1 "	73 x 48 x 37	5 "	241 x 183 x 151	18 "	613 x 530 x 479
1 1/4"	83 x 60 x 44	6 "	267 x 213 x 178	20 "	683 x 581 x 530
1 1/2"	95 x 70 x 52	8 "	321 x 267 x 229	24 "	791 x 683 x 632
2 "	111 x 89 x 70	10 "	400 x 321 x 283		
2 1/2"	130 x 102 x 83	12 "	457 x 378 x 340		

Class 900 ASME B16.20

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
1/2"	64 x 33 x 23	3 "	168 x 124 x 98	14 "	521 x 410 x 372
3/4"	70 x 40 x 29	4 "	206 x 154 x 124	16 "	575 x 467 x 422
1 "	79 x 48 x 37	5 "	248 x 183 x 151	18 "	638 x 530 x 479
1 1/4"	89 x 60 x 44	6 "	289 x 213 x 178	20 "	699 x 581 x 530
1 1/2"	98 x 70 x 52	8 "	359 x 267 x 229	24 "	838 x 683 x 632
2 "	143 x 89 x 70	10 "	435 x 321 x 283		
2 1/2"	165 x 102 x 83	12 "	498 x 378 x 340		

Class 1500 ASME B16.20

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
1/2"	64 x 33 x 23	3 "	175 x 124 x 98	14 "	578 x 410 x 372
3/4"	70 x 40 x 29	4 "	210 x 154 x 124	16 "	641 x 467 x 422
1 "	79 x 48 x 37	5 "	254 x 183 x 151	18 "	705 x 530 x 479
1 1/4"	89 x 60 x 44	6 "	283 x 213 x 178	20 "	756 x 581 x 530
1 1/2"	98 x 70 x 52	8 "	352 x 267 x 229	24 "	902 x 683 x 632
2 "	143 x 89 x 70	10 "	435 x 321 x 283		
2 1/2"	165 x 102 x 83	12 "	521 x 378 x 340		

Dimensions to suit ANSI Standard Flanges

Class 2500 ASME B16.20

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
1/2"	70 x 33 x 23	2 "	146 x 89 x 70	6 "	318 x 213 x 178
3/4"	76 x 40 x 29	2.1/2"	168 x 102 x 83	8 "	387 x 267 x 229
1 "	86 x 48 x 37	3 "	197 x 124 x 98	10 "	476 x 321 x 283
1.1/4"	105 x 60 x 44	4 "	235 x 154 x 124	12 "	550 x 378 x 340
1.1/2"	118 x 70 x 52	5 "	279 x 183 x 151		

Dimensions to suit DIN standard flanges

PN10

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	46 x 36 x 22	65	127 x 100 x 81	300	377 x 340 x 320
15	51 x 42 x 26	80	142 x 115 x 95	350	437 x 395 x 375
20	61 x 47 x 31	100	162 x 138 x 118	400	488 x 450 x 426
25	71 x 52 x 36	125	192 x 162 x 142	500	593 x 560 x 530
32	82 x 62 x 46	150	217 x 190 x 170	600	695 x 664 x 630
40	92 x 69 x 53	200	272 x 240 x 220		
50	107 x 81 x 65	250	327 x 290 x 270		

PN16

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	46 x 36 x 22	65	127 x 100 x 81	300	383 x 340 x 320
15	51 x 42 x 26	80	142 x 115 x 95	350	443 x 395 x 375
20	61 x 47 x 31	100	162 x 138 x 118	400	495 x 450 x 426
25	71 x 52 x 36	125	192 x 162 x 142	500	617 x 560 x 530
32	82 x 62 x 46	150	217 x 190 x 170	600	734 x 664 x 630
40	92 x 69 x 53	200	272 x 240 x 220		
50	107 x 81 x 65	250	328 x 290 x 270		

PN25

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	46 x 36 x 22	65	127 x 100 x 81	300	400 x 340 x 320
15	51 x 42 x 26	80	142 x 115 x 95	350	457 x 395 x 375
20	61 x 47 x 31	100	162 x 138 x 118	400	514 x 450 x 426
25	71 x 52 x 36	125	193 x 162 x 142	500	624 x 560 x 530
32	82 x 62 x 46	150	223 x 190 x 170	600	731 x 664 x 630
40	92 x 69 x 53	200	283 x 240 x 220		
50	107 x 81 x 65	250	340 x 290 x 270		

PN40

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	46 x 36 x 22	65	127 x 100 x 81	300	417 x 340 x 320
15	51 x 42 x 26	80	142 x 115 x 95	350	474 x 395 x 375
20	61 x 47 x 31	100	162 x 138 x 118	400	546 x 450 x 426
25	71 x 52 x 36	125	193 x 162 x 142	500	628 x 560 x 530
32	82 x 62 x 46	150	223 x 190 x 170	600	747 x 664 x 630
40	92 x 69 x 53	200	290 x 240 x 220		
50	107 x 81 x 65	250	352 x 290 x 270		

Metallic

Dimensions to suit DIN standard flanges

PN64

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	56 x 36 x 22	65	137 x 100 x 81	300	424 x 356 x 320
15	61 x 42 x 26	80	147 x 115 x 95	350	486 x 415 x 375
20	74 x 47 x 31	100	162 x 138 x 118	400	543 x 474 x 426
25	82 x 52 x 36	125	210 x 162 x 142	500	657 x 588 x 530
32	90 x 62 x 46	150	247 x 190 x 170	600	764 x 700 x 630
40	102 x 69 x 53	200	309 x 248 x 220		
50	112 x 81 x 65	250	364 x 300 x 270		

PN100

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	56 x 36 x 22	40	102 x 69 x 53	125	217 x 162 x 142
15	61 x 42 x 26	50	118 x 81 x 65	150	257 x 190 x 170
20	74 x 47 x 31	65	143 x 100 x 81	200	324 x 248 x 220
25	82 x 52 x 36	80	153 x 115 x 95	250	391 x 300 x 270
32	90 x 62 x 46	100	180 x 138 x 118	300	458 x 356 x 320

PN160

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	56 x 36 x 22	40	102 x 69 x 53	125	217 x 162 x 142
15	61 x 42 x 26	50	118 x 81 x 65	150	257 x 190 x 170
20	74 x 47 x 31	65	143 x 100 x 81	200	324 x 248 x 220
25	82 x 52 x 36	80	153 x 115 x 95		
32	90 x 62 x 46	100	180 x 138 x 118		

PN250

Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)	Nominal Size	Dimensions (mm)
10	67 x 36 x 22	25	82 x 52 x 36	50	123 x 87 x 65
15	72 x 42 x 26	32	100 x 66 x 46		
20	79 x 47 x 31	40	108 x 73 x 53		