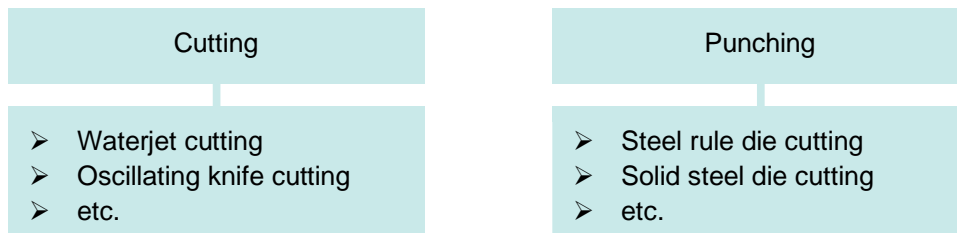




Tolerances Cut Parts

Cut gaskets out of semi-finished product / sheet material

Trelleborg flat gaskets based on fibrous material (HMF10 Series, HMF20), graphite (HMF30 Series), PTFE (HMF30 Series) and mica (HMF66) are basically manufactured from sheet material. Sealing plates are cut or punched in various processes. The following overview shows the most important methods for producing seals.



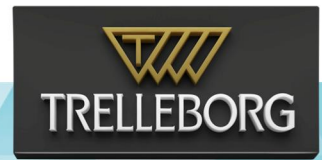
Tolerances of the gasket dimensions

Depending on the material, gasket thickness and manufacturing process, there are unavoidable dimensional tolerances. Since the gaskets are made of soft material, the usual dimensional tolerances for metallic workpieces must not be applied. The following table gives an overview of the tolerances that may be applicable.

Dimension [mm]		DIN 7715-5 [±]			ISO 2768-1 [±]		Dimension [mm]					
from	to	P3	P2	P1	c	m	from	to				
0	1,6	0,40	0,20	0,20	0,20	0,10	0,5	3				
1,6	3		0,30									
3	4		0,50		0,40	0,30	0,50	0,20	6	30		
4	6											
6	6,3	1,00	0,80	0,40	0,80	0,30	30	120				
6,3	10								0,60	0,50	0,30	0,20
10	25											
25	30	1,50	1,00	0,50	0,30	30	120					
30	40							2,00	1,20	0,60	0,30	0,50
40	63	2,50	1,40	0,80	1,20	0,50	120					
63	100							3,00	1,60	1,00	1,20	0,50
100	120	5,00	2,50	1,60	2,00	0,80	400					
120	160							1,5%	0,8%	0,5%	2,00	0,80
160	250	2,50	1,60	1,00	1,20	0,50	120					
250	400							3,00	1,60	1,00	1,20	0,50
400	1000	1,5%	0,8%	0,5%	2,00	0,80	400					



Dimensional tolerances according to DIN 7715-5 P2 can be applied in almost all processing cases. Tighter tolerances require consultation and consideration of the respective parameters.



Tolerances Cut Parts

Dimension [in]		DIN 7715-5 [±]			ISO 2768-1 [±]		Dimension [in]		
from	to	P3	P2	P1	c	m	from	to	
0,000	0,063	0,016	0,008	0,008	0,008	0,004	0,020	0,118	
0,063	0,118		0,012		0,012		0,118	0,236	
0,118	0,157		0,016		0,012		0,118	0,236	
0,157	0,236	0,020	0,016	0,012	0,020	0,008	0,236	1,181	
0,236	0,248	0,024	0,020						
0,248	0,394	0,031	0,024						
0,394	0,984	0,039	0,031	0,016	0,031	0,012	1,181	4,724	
0,984	1,181		0,039	0,031					
1,181	1,575		0,059	0,039					
1,575	2,480	0,079	0,047	0,020	0,047	0,020	4,724	15,748	
2,480	3,937	0,098	0,055	0,031					
3,937	4,724	0,118	0,063	0,039					
4,724	6,299	0,197	0,098	0,063	0,079	0,031	15,748	39,370	
6,299	9,843		0,118	0,063					0,039
9,843	15,748		0,197	0,098					0,063
15,748	39,370	1,5%	0,8%	0,5%	0,079	0,031	15,748	39,370	



Dimensional tolerances according to DIN 7715-5 P2 can be applied in almost all processing cases. Tighter tolerances require consultation and consideration of the respective parameters.

Further Information

Other FlatSeal™ Guides deal with the following basic topics:

- FlatSeal™ Guide 1 – Fundamentals of Flat Gasket Technology
- FlatSeal™ Guide 2 – Choice of Sealing Material
- FlatSeal™ Guide 3 – Installation Instructions
- FlatSeal™ Guide 4 – Optimized Gasket Geometry
- FlatSeal™ Guide 5 – Lubrication of Bolts
- FlatSeal™ Guide 6 – Roughness of Sealing Surfaces
- FlatSeal™ Guide 7 – Service Life of Sealing Systems
- FlatSeal™ Guide 8 – Shelf Life of Sealing Materials
- FlatSeal™ Guide 9 – Tolerances Cut Parts
- FlatSeal™ Guide 10 – Temperature Test

