

Tolerances of Silicone Products

15th June 2021

To Whom It May Concern:

Below find a List of the most commonly used Tolerances when working with Silicones.

1. Extrusion after DIN ISO 3302-1:2014
Sponge and Solid, including Tubing, Sections, Strips if not otherwise specified

Size in mm		Class E1 ±	Class E2 ±	Class E3 ±
from	up to			
0,00	1,50	± 0,15	± 0,25	± 0,40
1,51	2,50	± 0,20	± 0,35	± 0,50
2,51	4,00	± 0,25	± 0,40	± 0,70
4,01	6,30	± 0,35	± 0,50	± 0,80
6,31	10,00	± 0,40	± 0,70	± 1,00
10,01	16,00	± 0,50	± 0,80	± 1,30
16,01	25,00	± 0,70	± 1,00	± 1,60
25,01	40,00	± 0,80	± 1,30	± 2,00
40,01	63,00	± 1,00	± 1,60	± 2,50
63,01	100,00	± 1,30	± 2,00	± 3,20
		Tolerance in %		
100,01	-	± 1,30%	± 2,00%	± 3,20%

2. Cut Length Tolerances DIN ISO 3302-1:2014
Tolerances for any cut products such as tubing, cord or other profiles

Size in mm		Class L1	Class L2	Class L3
from	up to	±	±	±
0	40	± 0,70	± 1,00	± 1,60
40	63	± 0,80	± 1,30	± 2,00
63	100	± 1,00	± 1,60	± 2,50
100	160	± 1,30	± 2,00	± 3,20
160	250	± 1,60	± 2,50	± 4,00
250	400	± 2,00	± 3,20	± 5,00
400	630	± 2,50	± 4,00	± 6,30
630	1000	± 3,20	± 5,00	± 10,00
1000	1600	± 4,00	± 6,30	± 12,50
1600	2500	± 5,00	± 10,00	± 16,00
2500	4000	± 6,30	± 12,50	± 20,00
		Tolerance in %		
>		± 0,16	± 0,32	± 0,50

3. Moulding Tolerances DIN ISO 3302-1:2014

Tolerances for any moulded products. They get divided into two groups "F" and "C".

"F" stands for "Fixed Dimensions": Dimensions which are not affected by deforming influences like flash thickness or lateral displacement of different mould parts (upper and lower parts or cores).

"C" stands for "Closure Dimensions": Dimensions which can be altered by variation in the flash thickness or lateral displacement of different mould parts.

Size in MM		Class M1 ±		Class M2 ±		Class M3 ±	
from	up to	F	C	F	C	F	C
0,00	4,00	± 0,08	± 0,10	± 0,10	± 0,15	± 0,25	± 0,40
4,01	6,30	± 0,10	± 0,10	± 0,15	± 0,20	± 0,25	± 0,40
6,31	10,00	± 0,10	± 0,15	± 0,20	± 0,20	± 0,30	± 0,50
10,01	16,00	± 0,15	± 0,20	± 0,20	± 0,25	± 0,40	± 0,60
16,01	25,00	± 0,20	± 0,20	± 0,25	± 0,35	± 0,50	± 0,80
25,01	40,00	± 0,20	± 0,25	± 0,35	± 0,40	± 0,60	± 1,00
40,01	63,00	± 0,25	± 0,35	± 0,40	± 0,50	± 0,80	± 1,30
63,01	100,00	± 0,35	± 0,40	± 0,50	± 0,70	± 1,00	± 1,60
100,01	160,00	± 0,40	± 0,50	± 0,70	± 0,80	± 1,30	± 2,00
Tolerance in %							
>	160,00	± 0,30%	± 0,40%	± 0,50%	± 0,70%	± 0,80%	± 1,30%

4. Silex Solid Sheeting DIN ISO 3302-1:2014 if not otherwise specified Class ST2 applies.

Size in mm		Class ST1	Class ST2	Class ST3
from	up to	±	±	±
0,00	1,00	± 0,15	± 0,20	± 0,25
1,01	1,60	± 0,15	± 0,25	± 0,35
1,61	2,50	± 0,20	± 0,35	± 0,40
2,51	4,00	± 0,25	± 0,40	± 0,50
4,01	6,30	± 0,35	± 0,50	± 0,70
6,31	10,00	± 0,40	± 0,70	± 0,80
10,01	16,00	± 0,50	± 0,80	± 1,00
		Tolerance in %		
16,01	Max.	± 3,50%	± 5,00%	± 7,00%

5. Silex Sponge Sheeting if not otherwise specified:

Size in mm		Tolerance
from	up to	± in mm
1,60	7,00	± 0,50
7,50	10,00	± 0,80
11,00	11,50	± 1,00
> 11,50	17,00	± 1,50
> 17,00	19,00	± 1,90
> 19,00	20,00	± 2,00
> 20,00	25,00	± 2,50
> 25,00	50,00	± 10%

6. Tolerances for Cut Parts (Waterjet Cut, Punched seals and Gaskets) if not otherwise specified Class P2 applies:

Size in mm		Class P1	Class P2	Class P3
from	up to	±	±	±
0,00	1,60	± 0,20	± 0,20	± 0,40
1,61	4,00	± 0,20	± 0,30	± 0,40
4,01	6,30	± 0,20	± 0,40	± 0,50
6,31	10,00	± 0,30	± 0,50	± 0,60
10,01	25,00	± 0,30	± 0,60	± 0,80
25,01	40,00	± 0,40	± 0,80	± 1,00
40,01	63,00	± 0,50	± 1,00	± 1,50
63,01	100,00	± 0,60	± 1,20	± 2,00
100,01	160,00	± 0,80	± 1,40	± 2,50
160,01	250,00	± 1,00	± 1,60	± 3,00
250,01	400,00	± 1,60	± 2,50	± 5,00
		Tolerance in %		
> 400,01		± 0,50%	± 0,80%	± 1,5%