

# Tolerances

Our standard tolerances are marked with a blue colour.

## Tolerances for molded parts - rubber

acc. to ISO 3302-1

nominal dimension (mm)	tolerance class M1		tolerance class M2		tolerance class M3		tolerance class M4	
	mold-dependant dimensions	dimensions with overflow	mold-dependant dimensions	dimensions with overflow	mold-dependant dimensions	dimensions with overflow	mold-dependant dimensions	dimensions with overflow
	tolerances - in mm:		tolerances - in mm :		tolerances - in mm :		tolerances - in mm :	
0 - 6,3	± 0,10	± 0,10	± 0,15	± 0,25	± 0,25	± 0,40	± 0,50	± 0,50
> 6,3 - 10	± 0,10	± 0,15	± 0,20	± 0,30	± 0,30	± 0,50	± 0,70	± 0,70
> 10 - 16	± 0,15	± 0,20	± 0,20	± 0,40	± 0,40	± 0,60	± 0,80	± 0,80
> 16 - 25	± 0,20	± 0,20	± 0,25	± 0,50	± 0,50	± 0,80	± 1,00	± 1,00
> 25 - 40	± 0,20	± 0,25	± 0,35	± 0,60	± 0,60	± 1,00	± 1,30	± 1,30
> 40 - 63	± 0,25	± 0,35	± 0,40	± 0,80	± 0,80	± 1,30	± 1,60	± 1,60
> 63 - 100	± 0,35	± 0,40	± 0,50	± 1,00	± 1,00	± 1,60	± 2,00	± 2,00
> 100 - 160	± 0,40	± 0,50	± 0,70	± 1,30	± 1,30	± 2,00	± 2,50	± 2,50
	tolerances - in %:		tolerances - in % :		tolerances - in % :		tolerances - in % :	
> 160	± 0,30	± 0,40	± 0,50	± 0,70	± 0,80	± 1,30	± 1,50	± 1,50

## Tolerances for profiles and hoses (without reinforcement) - rubber and TPE

acc. to ISO 3302-1

nominal dimension (mm)	tolerance class E1	tolerance class E2	tolerance class E3
	tolerances - in mm :		
0 - 1,5	± 0,15	± 0,25	± 0,40
> 1,5 - 2,5	± 0,20	± 0,35	± 0,50
> 2,5 - 4,0	± 0,25	± 0,40	± 0,70
> 4,0 - 6,3	± 0,35	± 0,50	± 0,80
> 6,3 - 10,0	± 0,40	± 0,70	± 1,00
> 10,0 - 16,0	± 0,50	± 0,80	± 1,30
> 16,0 - 25,0	± 0,70	± 1,00	± 1,60
> 25,0 - 40,0	± 0,80	± 1,30	± 2,00
> 40,0 - 63,0	by agreement	± 1,60	± 2,50
> 63,0 - 100,0	by agreement	± 2,00	± 3,20

## Tolerances for sheets, cut-to-size parts, die-cut parts

acc. to DIN 7715 part 5

nominal dimension (mm)	tolerance class P1	tolerance class P2	tolerance class P3
	tolerances - in mm		
0 - 1,6	± 0,20	± 0,20	± 0,40
> 1,6 - 4	± 0,20	± 0,30	± 0,40
> 4 - 6,3	± 0,20	± 0,40	± 0,50
> 6,3 - 10	± 0,30	± 0,50	± 0,60
> 10 - 25	± 0,30	± 0,60	± 0,80
> 25 - 40	± 0,40	± 0,80	± 1,00
> 40 - 63	± 0,50	± 1,00	± 1,50
> 63 - 100	± 0,60	± 1,20	± 2,00
> 100 - 160	± 0,80	± 1,40	± 2,50
> 160 - 250	± 1,00	± 1,60	± 3,00
> 250 - 400	± 1,60	± 2,50	± 5,00
	tolerances - in %:		
> 400	± 0,50	± 0,80	± 1,50

## Tolerances for cold rings and extruded vulcanized rings

acc. to ISO 3302-1

nominal dimension (mm)	tolerances as to cord thickness	tolerances as to length and inner-Ø	
	tolerance class E2	+/- 0,8%	
	tolerances – in mm		
0 - 1,5	± 0,25		
> 1,5 - 2,5	± 0,35		
> 2,5 - 4,0	± 0,40		
> 4,0 - 6,3	± 0,50		
> 6,3 - 10,0	± 0,70		
> 10,0 - 16,0	± 0,80		
> 16,0 - 25,0	± 1,00		
> 25,0 - 40,0	± 1,30		
> 40,0 - 63,0	± 1,60		
> 63,0 - 100,0	± 2,00		

## Tolerances for sponge rubber

acc. To ISO 3302-1

nominal dimension (mm)	tolerance class E1	tolerance class E2	tolerance class E3
	tolerances – in mm	tolerances – in mm	tolerances – in mm
0 - 1,5	± 0,15	± 0,25	± 0,40
> 1,5 - 2,5	± 0,20	± 0,35	± 0,50
> 2,5 - 4,0	± 0,25	± 0,40	± 0,70
> 4,0 - 6,3	± 0,35	± 0,50	± 0,80
> 6,3 - 10,0	± 0,40	± 0,70	± 1,00
> 10,0 - 16,0	± 0,50	± 0,80	± 1,30
> 16,0 - 25,0	± 0,70	± 1,00	± 1,60
> 25,0 - 40,0	± 0,80	± 1,30	± 2,00
> 40,0 - 63,0	by agreement	± 1,60	± 2,50
> 63,0 - 100,0	by agreement	± 2,00	± 3,20

## Tolerances for cut-to-length extrusions

acc. to ISO 3302-1

nominal dimension (mm)	tolerance class L1	tolerance class L2	tolerance class L3
	tolerances – in mm	tolerances – in mm	tolerances – in mm
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
> 4000	tolerances – in mm ± 0,16	tolerances – in mm ± 0,32	tolerances – in mm ± 0,50

All tech data presented without guarantee - no liability for correctness, actuality and completeness