

STANDARD TOLERANCE GUIDE SHEET

Provided for general guidance only, contact us at sbr.aero for any specific requirements you may have.

Rubber Moulding

Linear Dimensions (BS ISO 3302-1)

Nominal Dimensions		Class M1		Class M2		Class M3		Class M4
Above	Up to and including	F±	C±	F±	C±	F±	C±	F & C±
0	4.0	0.08	0.10	0.10	0.15	0.25	0.40	0.50
4.0	6.3	0.10	0.12	0.15	0.20	0.30	0.50	0.70
6.3	10.0	0.10	0.15	0.20	0.20	0.40	0.60	0.80
10.0	16.0	0.15	0.20	0.20	0.25	0.50	0.80	1.00
16.0	25.0	0.20	0.20	0.25	0.35	0.60	1.00	1.30
25.0	40.0	0.20	0.25	0.35	0.40	0.80	1.30	1.60
40.0	63.0	0.25	0.35	0.40	0.50	1.00	1.60	2.00
63.0	100.0	0.35	0.40	0.50	0.70	1.30	2.00	2.50
100.0	160.0	0.40	0.50	0.70	0.80	1.30	2.00	2.50
160.0	∞	0.3%	0.4%	0.5%	0.7%	0.8%	1.3%	1.5%

F | Fixed dimensions; dimensions created by features on the same part of the tool.

C | Closure dimensions; dimensions that are created across two mating parts of a tool and therefore more prone to variation.

All values in millimetres unless otherwise stated.

Hardness tolerance variation from nominal

Shore A | ± 5°

IRHD | ± 5°

Extrusions

Cross-sectional dimensions (BS ISO 3302-1, E2)

Range	0 - 1.5	1.5 - 2.5	2.5 - 4.0	4.0 - 6.3	6.3 - 10	10 - 16	16 - 25	25 - 40	40 - 63	63 - 100
Tolerance ±	0.25	0.35	0.40	0.50	0.70	0.80	1.00	1.30	1.60	2.00

Range | Above - up to and including. All values in millimetres unless otherwise stated.

Machined Rubbers & Plastics

Linear Dimensions (DIN ISO 2768-1 m)

Range	0 - 6mm	6 - 30mm	30 - 120mm	120 - 400mm	400 - 900mm
Tolerance ±	± 0.10mm	± 0.20mm	± 0.30mm	± 0.50mm	± 0.80mm

Hardness tolerance variation from nominal

Shore A | ± 5°

IRHD | ± 5°

Cutting & Sheet Material

Linear Dimensions

	Punched parts		Hand cut parts including hand cut strip		Strip cut parts (width ± 0.50mm)	
Range	0 - 200mm	> 200mm	0mm - 1000mm	> 1000mm	0mm - 1000mm	> 1000mm
Tolerance ±	± 0.20mm	± 0.50mm	± 1mm	± 0.5%	± 1.00mm	± 0.5%

Thickness

0mm - 50mm | ± 0.25mm

Hardness tolerance variation from nominal

Shore A | ± 5°

IRHD | ± 5°