

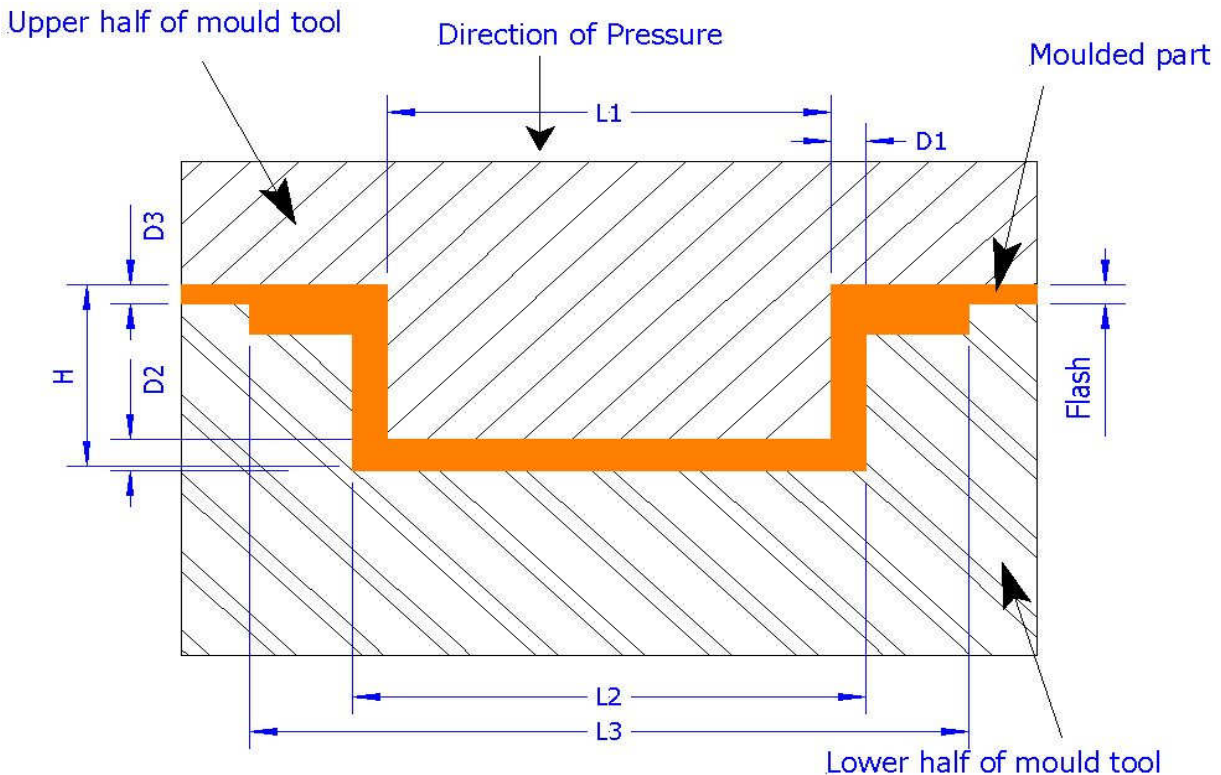
Tolerances for Moulded and Extruded Products

Mouldings

F: Fixed dimensions, unaffected by closure of mould parts. (Dimensions L1, L2 and L3 in diagram below)

C: Closure dimensions, affected by mould part alignment. (Dimensions D1, D2, D3 and H in diagram below)

Mould Dimensions		Class M1		Class M2		Class M3		Class M4	
above mm	up to mm	F ±mm	C ±mm	F ±mm	C ±mm	F ±mm	C ±mm	F ±mm	C ±mm
0.0	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			0.70	
6.3	10	0.10	0.15	0.20	0.20	0.30	0.50	0.80	
10	16	0.15	0.20	0.20	0.25	0.40	0.60	1.00	
16	25	0.20	0.20	0.25	0.35	0.60	0.80	1.30	
25	40	0.20	0.25	0.35	0.40	0.60	1.00	1.60	
40	63	0.25	0.35	0.40	0.50	0.80	1.30	2.00	
63	100	0.35	0.40	0.50	0.70	1.00	1.60	2.50	
100	160	0.40	0.50	0.70	0.80	1.30	2.00		
160mm +		F: ±0.3% C: ±0.4%		F: ±0.5% C: ±0.7%		F: ±0.8% C: ±1.3%		F: ±1.5% C: ±1.5%	





Extrusions

Nominal Dimension		Class E1		Class E2		Class E3	
above mm	up to mm	±mm	±mm	±mm	±mm	±mm	±mm
0.0	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	0.40		0.70		1.00	
10	16	0.50		0.80		1.30	
16	25	0.70		1.00		1.60	
25	40	0.80		1.30		2.00	
40	63	1.00		1.60		2.50	
63	100	1.30		2.00		3.20	

Rubber Cut Lengths

Nominal Dimension		Class E1		Class E2		Class E3	
above mm	up to mm	±mm	±mm	±mm	±mm	±mm	±mm
0.0	40.0	0.70		1.00		1.60	
40.0	63.0	0.80		1.30		2.00	
63.0	100.0	1.00		1.60		2.50	
100.0	160.0	1.30		2.00		3.20	
160.0	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	
2500.0	4000.0	6.30		12.50		20.00	
4000.0	+	0.16%		0.32%		0.50%	

Rubber Hardness Tolerances

± 5° IRHD



Tool-cut, Hand-cut & CAD-cut Gasket Tolerances

Rigid Material Gaskets

INSIDE AND OUTSIDE DIAMETER R.F. IBC & FF types	TOOL CUT	HAND/CAD CUT
	Standard 9A	Standard 9B
Up to and including 24" n.b	OD $\pm 0.030''$ $\pm 0.8\text{mm}$ ID ± 0.030 $\pm 0.8\text{mm}$	OD $\pm 0.060''$ $\pm 1.5\text{mm}$ ID $\pm 0.060''$ $\pm 1.5\text{mm}$
Above 24" up to and incl. 60" n.b	OD $\pm 0.060''$ $\pm 1.5\text{mm}$ ID $\pm 0.060''$ $\pm 1.5\text{mm}$	OD $\pm 0.080''$ $\pm 2.0\text{mm}$ ID ± 0.080 $\pm 2.0\text{mm}$
Above 60" n.b	OD $\pm 0.060''$ $\pm 1.5\text{mm}$ ID $\pm 0.060''$ $\pm 1.5\text{mm}$	OD $\pm 0.100''$ $\pm 2.5\text{mm}$ ID $\pm 0.100''$ $\pm 2.5\text{mm}$

PITCH CIRCLE DIAMETER & DIAGONALS OF SQUARES	TOOL CUT	HAND/CAD CUT
	Standard 9A	Standard 9B
Up to, and including 6" n.b/diagonal	$\pm 0.020''$ $\pm 0.5\text{mm}$	$\pm 0.020''$ $\pm 0.5\text{mm}$
Above 6" up to and incl 24" n.b/diagonal	$\pm 0.040''$ $\pm 1.0\text{mm}$	$\pm 0.040''$ $\pm 1.0\text{mm}$
Above 24" n.b/diagonal	$\pm 0.060''$ $\pm 1.5\text{mm}$	$\pm 0.060''$ $\pm 1.5\text{mm}$

BOLT HOLE DIAMETER	TOOL CUT	HAND/CAD CUT
	Standard 9A	Standard 9B
Up to, and including 36" n.b	$\pm 0.040''$ $\pm 1.0\text{mm}$	$\pm 0.040''$ $\pm 1.0\text{mm}$
Above 36" n.b	$\pm 0.060''$ $\pm 2.0\text{mm}$	$\pm 0.060''$ $\pm 2.0\text{mm}$

Flexible Material Gaskets i.e. Rubber, Sponge, Cork etc.

Depending on application, tolerances may be applied with discretion due to material flexibility. With Sales Office and Quality Controller's agreement, add 50% to tolerance levels above.

For flexible materials use tolerance figure above plus 50% E.G. Bolt Hole Diameter for gaskets up to and including 36" N.B. tolerance on bolt hole size is +/- 1.5mm.



Rubber Sheeting Tolerances

MATERIAL THICKNESS mm	TOLERANCE ±mm	Roll Width ± %	Roll Length ± %
0.7	0.2	2	5
1	0.2	2	5
1.5	0.2	2	5
2	0.3	2	5
2.5	0.3	2	5
3	0.3	2	5
4	0.4	2	5
4.5	0.4	2	5
5	0.4	2	5
6	0.5	2	5
8	0.7	2	5
10	1.0	2	5
12	1.0	2	5
15	1.5	2	5
20	1.5	2	5
25	2.0	2	5
30	2.5	2	5
35	3.0	2	5
40	3.5	2	5
40+	10%	2	5