

## ISO 3302-11996(E)

### M-CLASS CLASS MOLDEO

#### 3. Fixed dimensions and closure dimensions

In moulding a rubber product, more rubber is used than is required to fill the cavity, and the excess is flashed. This flash tends to prevent the mould sections from fully closing and thus affects the finished part dimensions.

**NOTE 3:** For products moulded by transfer or injection, it is possible to regard all dimensions as fixed.

Two sets of tolerances, F and C, are given and are defined below.

##### 3.1 Fixed dimensions (F):

Dimensions which are not affected by deforming influences like flash thickness or lateral displacement of different mould parts

(upper and lower parts or cores). See figure 1, dimensions 1, 2 and 3.

##### 3.2 Closure dimension (C):

Dimensions which can be altered by variation in the flash thickness or lateral displacement of different mould parts. See figure 1, dimensions  $d_1$ ,  $d_2$ ,  $d_3$  and  $h$ .

**NOTE 4:** The dimensions for F and C can only be tolerance insofar as they are independent of each other.

#### 4. Tolerances

The tolerances to be applied shall be chosen, by agreement between the interested parties, from the different classes of tolerance in table 1.

Standard tolerances are given in table 1. Fixed tolerances (F) are related by size to each dimension, but all closure tolerances (C) are determined by the largest closure dimension.

**Table 1 - Toletances for mouldings**

*Values in millimeters (unless indicated otherwise)*

Nominal	Dimension	Class	M1	Class	M2	Class	M3	Class	M4
above	Up to and including	F	C	F	C	F	C	F anc	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				
6,3	10	0,10	0,15	0,20	0,20	0,30	0,50	0,70	
10	16	0,15	0,20	0,20	0,25	0,40	0,60	0,80	
16	25	0,20	0,20	0,25	0,35	0,50	0,80	1,00	
25	40	0,20	0,25	0,35	0,40	0,60	1,00	1,30	
40	63	0,25	0,35	0,40	0,50	0,80	1,30	1,60	
63	100	0,35	0,40	0,50	0,70	1,00	1,60	2,0	
100	160	0,40	0,50	0,70	0,80	1,30	2,0	2,5	
160	-	0,3 %	0,4 %	0,5 %	0,7 %	0,8 %	1,3 %	1,5 %	

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