

# MARYLAND METRICS

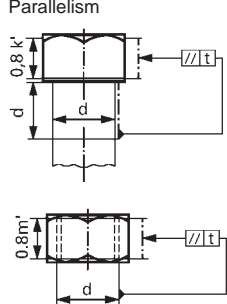
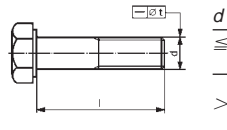
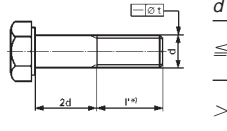
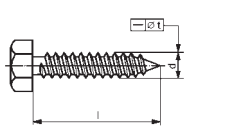
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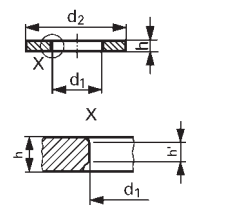
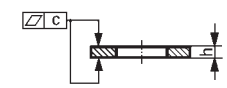
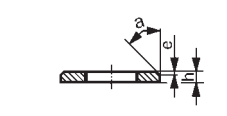
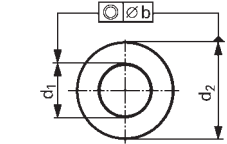
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## TECHNICAL INFORMATION and DATA

Feature	Tolerance <i>t</i> for product grades			Notes
	A	B	C	
<b>Parallelism</b> 	$0,017 \times k'$		$0,035 \times k'$	for $k'$ and $m'$ see product standards
	$0,017 \times m'$		$0,035 \times m'$	
<b>Straightness</b> 	$d$ $\leq 8$	$t = 0,002 l + 0,05$	-	
	$d$ $> 8$	$t = 0,002 l + 0,05$	-	
	$d$ $\leq 8$	-	$t = 2$ ( $0,002 l'$ $+ 0,05$ )	*) Straightness tolerance is applicable only for $l'$ .
	$d$ $> 8$	-	$t = 2$ ( $0,0025 l'$ $+ 0,05$ )	
		$t = 0,003 l + 0,05$		for $l \leq 20 d$

Feature		Tolerances					
		Product grades					
		F		A		C	
<b>Clearance hole (punched)</b> <b>Outside diameter (punched)</b> 	$h$	$d_1$	$d_2$	$d_1$	$d_2$	$d_1$	$d_2$
	$\leq 4$	H12	h13	H13	h14	H14	h16
	$>$	H13	h14	H14	h15	H15	h16
	$h$	$h'_1$ min.		$h'_1$ min.		$h'_2$ min.	
	$\leq 4$	$0,5 h$		$0,5 h$		no requirements	
	$> 4$	$0,3 h$		$0,3 h$		no requirements	
<b>Thickness</b> 	$h$	$h$ tolerance	$c^1$	$h$ tolerance	$c^1$	$h$ tolerance	$c^1$
	$> 0,5$	$\pm 0,04$	0,07	$\pm 0,05$	0,1	-	no requirements
	$> 0,5 \leq 1$	$\pm 0,06$	0,1	$\pm 0,1$	0,15	$\pm 0,2$	
	$> 1 \leq 2,5$	$\pm 0,12$	0,2	$\pm 0,2$	0,2	$\pm 0,3$	
	$> 2,5 \leq 4$	$\pm 0,16$	0,3	$\pm 0,3$	0,3	$\pm 0,6$	
	$> 4 \leq 6$	$\pm 0,2$	0,4	$\pm 0,6$	0,4	$\pm 1$	
	$> 6 \leq 10$	$\pm 0,24$	0,6	$\pm 1$	0,6	$\pm 1,2$	
	$> 10 \leq 20$	$\pm 0,28$	1	$\pm 1,2$	1	$\pm 1,6$	
	$c^1$ : for stainless washers tolerance is $2 \times c$						
<b>Chamfer</b> 		$\alpha = 30^\circ$ to $45^\circ$ $e_{min} = 0,25 h$ $e_{max} = 0,5 h$				no requirements	
<b>Coaxiality</b> 	$d_2$	$b$		$b$		$b$	
	$\leq 50$	2 IT11		2 IT12		2 IT15	
	$> 50$	2 IT12		2 IT13		2 IT16	