

MARYLAND METRICS

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TECHNICAL INFORMATION and DATA

Minimum breaking torques ($M_{B \min}$) for bolts and screws of property classes according DIN-ISO 898/1

Thread diameter	Pitch P mm	Minimum breaking torque $M_{B \min}$ for property class Nm			
		5.8	8.8	10.9	12.9
M 1	0,25	0,022	0,033	0,040	0,045
M 1,2	0,25	0,05	0,075	0,092	0,10
M 1,4	0,3	0,08	0,12	0,14	0,16
M 1,6	0,35	0,11	0,16	0,20	0,22
M 2	0,4	0,25	0,37	0,45	0,50
M 2,5	0,45	0,55	0,82	1,0	1,1
M 3	0,5	1,0	1,5	1,9	2,1
M 3,5	0,6	1,6	2,4	3,0	3,3
M 4	0,7	2,4	3,6	4,4	4,9
M 5	0,8	5,1	7,6	9,3	10
M 6	1	8,7	13	16	17
M 8	1,25	22	33	40	44
M 8 × 1	–	25	38	46	52
M 10	1,5	44	66	81	90
M 10 × 1	–	56	84	102	114
M 10 × 1,25	–	50	75	91	102

Materials for nuts

Property class		Chemical composition limits (check analysis), %			
		C max.	Mn min.	P max.	S max.
4 ¹⁾ , 5 ¹⁾ , 6 ¹⁾	–	0,50	–	0,060	0,150
8, 9	04 ¹⁾	0,58	0,25	0,060	0,150
10 ²⁾	05 ²⁾	0,58	0,30	0,048	0,058
12 ²⁾	–	0,58	0,45	0,048	0,058

¹⁾ Nuts of these property classes may be manufactured from free-cutting steel unless otherwise agreed between the purchaser and the manufacturer. In such cases the following maximum sulphur, phosphorus and lead contents are permissible:

sulphur 0,34%

phosphorus 0,11%

lead 0,35%

²⁾ Alloying elements may be added if necessary to develop the mechanical properties of the nuts.