

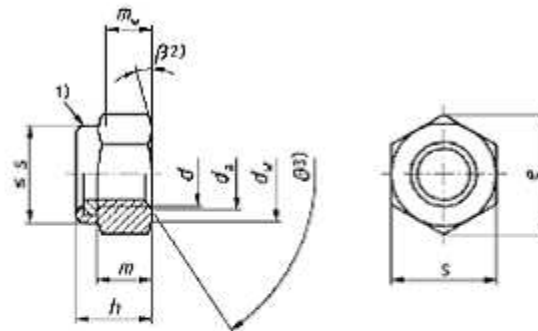
Prevailing torque type hexagon nuts (with non-metallic insert), style 1 – Property classes 5, 8 and 10

1 Scope

This International Standard specifies the characteristics of prevailing torque type hexagon nuts (with non-metallic insert), style 1, with threads from M3 up to and including M36, in product grade A for threads up to and including M16 and product grade B for threads above M16, and with property classes 5, 8 and 10.

NOTE — The dimensions of the nuts correspond to those given in ISO 4032 plus prevailing torque feature.

If other specifications are required, they should be selected from existing International Standards, for example ISO 261, ISO 965-2, ISO 2320 and ISO 4759-1.



- 1) Prevailing torque element, shape optional
- 2) $\beta = 15^\circ$ to 30°
- 3) $\theta = 90^\circ$ to 120°

Table 1 — Dimensions

		Dimensions in millimetres												
Thread (d)		M3	M4	M5	M6	M8	M10	M12	(M14) ¹⁾	M16	M20	M24	M30	M36
$P^2)$		0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	3	3,5	4
d_2	max.	3,45	4,6	5,75	6,75	8,75	10,8	13	15,1	17,3	21,6	25,9	32,4	38,9
	min.	3,00	4,0	5,00	6,00	8,00	10,0	12	14,0	16,0	20,0	24,0	30,0	36,0
d_w	min.	4,57	5,88	6,88	8,88	11,63	14,63	16,63	19,64	22,49	27,7	33,25	42,75	51,11
e	min.	6,01	7,66	8,79	11,05	14,38	17,77	20,03	23,36	26,75	32,95	39,55	50,85	60,79
h	max.	4,5	6,00	6,80	8,00	9,50	11,9	14,9	17,0	19,1	22,8	27,1	32,6	38,9
	min.	4,02	5,52	6,22	7,42	8,92	11,2	14,2	15,9	17,8	20,7	25,0	30,1	36,4
$m^2)$	min.	2,15	2,9	4,4	4,9	6,44	8,04	10,37	12,1	14,1	16,9	20,2	24,3	29,4
$m_w^4)$	min.	1,72	2,32	3,52	3,92	5,15	6,43	8,3	9,68	11,28	13,52	16,16	19,44	23,52
z	max.	5,50	7,00	8,00	10,00	13,00	16,00	18,00	21,00	24,00	30,00	36	46	55,0
	min.	5,32	6,78	7,78	9,78	12,73	15,73	17,73	20,67	23,67	29,16	35	45	53,8

1) The size in brackets should be avoided if possible.
 2) P is the pitch of the thread.
 3) Minimum thread height.
 4) Minimum wrenching height.

Table 2 — Requirements and reference International Standards

Material	Nut body	Steel		
	Insert	For example, polyamid		
General requirements	International Standard	ISO 8992		
Thread	Tolerance	6H		
	International Standards	ISO 261, ISO 965-2		
Mechanical and performance properties	Property class	5	8	10
	Style decisive for mechanical properties	style 1	style 1	style 1
	International Standard	ISO 2320		
Tolerances	Product grade	For $d \leq M16$: A For $d > M16$: B		
	International Standard	ISO 4759-1		
Finish	<p>As processed</p> <p>Requirements for electroplated coatings are covered in ISO 4042.</p> <p>If different electroplating requirements are desired or if requirements are needed for other finishes, they should be negotiated between customer and supplier.</p> <p>Limits for surface discontinuities are covered in ISO 6157-2.</p>			
Acceptability	For acceptance procedure, see ISO 3269.			