

Prevailing torque type hexagon thin nuts with nonmetallic insert

DIN
985

Sechskantmuttern mit Klemmteil;
mit nichtmetallischem Einsatz, niedrige Form

Supersedes September 1977 edition.

In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

Dimensions in mm

1 Field of application

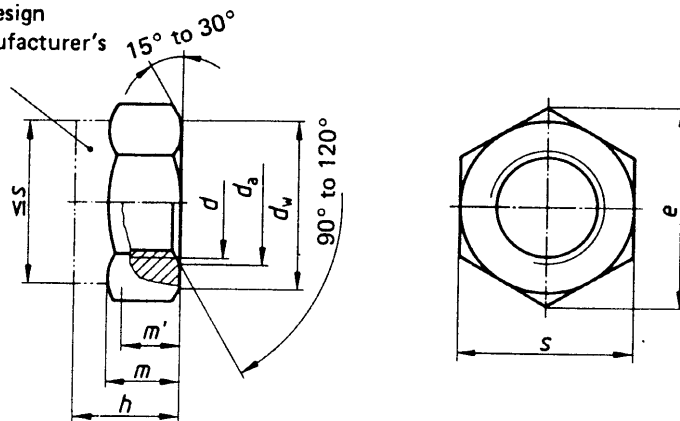
This standard specifies requirements for M 3 to M 48 prevailing torque type hexagon nuts with nonmetallic insert, assigned to product grade A for sizes up to M 16 and product grade B for sizes over M 16.

If, in special cases, nuts are to comply with specifications other than those given in this standard, e.g. regarding materials other than those specified in DIN 267 Part 15, performance at temperatures above + 120 °C, or corrosion resistance, this shall be agreed at the time of ordering (cf. DIN 267 Part 15).

Note. The proof load values specified in DIN 267 Part 4, which are lower than those specified in DIN 267 Part 15 and result in a correspondingly lower resistance to stripping (reduced locking action), apply for nuts covered in the present standard. DIN 267 Part 15 shall, however, apply for the proof clamp loads and the prevailing torques. These nuts are not suitable for yield point tightening methods.

2 Dimensions

Prevailing torque
element (design
at the manufacturer's
discretion)



m' = minimum wrenching height.

Continued on pages 2 to 4

Thread size	M 3	M 4	M 5	M 6	M 7	M 8	M 10	M 12	M 14	M 16	M 18	
	-	-	-	-	-	M 8 × 1	M 10 × 1	M 12 × 1,5	M 14 × 1,5	M 16 × 1,5	M 18 × 2	
	-	-	-	-	-	-	M 10 × 1,25	M 12 × 1,25	-	-	M 18 × 1,5	
<i>P</i> ¹⁾	0,5	0,7	0,8	1	1	1,25	1,5	1,75	2	2	2,5	
<i>d_a</i>	min.	3	4	5	6	7	8	10	12	14	16	18
	max.	3,45	4,6	5,75	6,75	7,75	8,75	10,8	13	15,1	17,3	19,5
<i>d_w</i> min.	4,6	5,9	6,9	8,9	9,6	11,6	15,6	17,4	20,5	22,5	24,9	
<i>e</i> min.	6,01	7,66	8,79	11,05	12,12	14,38	18,9	21,1	24,49	26,75	29,56	
<i>h</i>	max. = nominal size	4	5	5	6	7,5	8	10	12	14	16	18,5
	min.	3,7	4,7	4,7	5,7	7,14	7,64	9,64	11,57	13,3	15,3	17,66
<i>m</i> ²⁾ min.	2,4	2,9	3,2	4	4,7	5,5	6,5	8	9,5	10,5	13	
<i>m'</i> ³⁾ min.	1,65	2,2	2,75	3,3	3,85	4,4	5,5	6,6	7,7	8,8	9,9	
<i>s</i>	max. = nominal size	5,5	7	8	10	11	13	17	19	22	24	27
	min.	5,32	6,78	7,78	9,78	10,73	12,73	16,73	18,67	21,67	23,67	26,16

Thread size	M 20	M 22	M 24	M 27	M 30	M 33	M 36	M 39	M 42	M 45	M 48	
	M 20 × 2	M 22 × 2	M 24 × 2	M 27 × 2	M 30 × 2	M 33 × 2	M 36 × 3	M 39 × 3	M 42 × 3	M 45 × 3	M 48 × 3	
	M 20 × 1,5	M 22 × 1,5	-	-	-	-	-	-	-	-	-	
<i>P</i> ¹⁾	2,5	2,5	3	3	3,5	3,5	4	4	4,5	4,5	5	
<i>d_a</i>	min.	20	22	24	27	30	33	36	39	42	45	48
	max.	21,6	23,7	25,9	29,1	32,4	35,6	38,9	42,1	45,4	48,6	51,8
<i>d_w</i> min.	27,7	29,5	33,2	38	42,7	46,6	51,1	55,9	60,6	64,7	69,4	
<i>e</i> min.	32,95	35,03	39,55	45,2	50,85	55,37	60,79	66,44	72,09	76,95	82,6	
<i>h</i>	max. = nominal size	20	22	24	27	30	33	36	39	42	45	48
	min.	18,7	20,7	22,7	25,7	28,7	31,4	34,4	37,4	40,4	43,4	46,4
<i>m</i> ²⁾ min.	14	15	15	17	19	22	25	27	29	32	36	
<i>m'</i> ³⁾ min.	11	12,2	13,2	14,8	16,5	18,2	19,8	21,5	23,1	24,8	26,5	
<i>s</i>	max. = nominal size	30	32	36	41	46	50	55	60	65	70	75
	min.	29,16	31	35	40	45	49	53,8	58,8	63,8	68,1	73,1

1) *P* = pitch of coarse thread as specified in DIN 13 Part 12.

2) Also minimum thread length.

3) *m'* = 0,55 *d*.