

Square thin nuts

Product grade B

DIN
562

Vierkantmuttern, niedrige Form; Produktklasse B

Supersedes February 1985 edition.

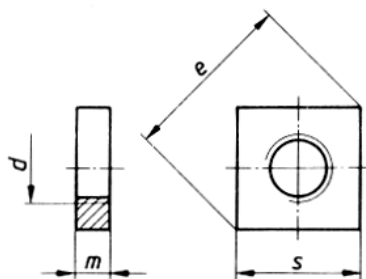
In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

Dimensions in mm

1 Scope and field of application

This standard specifies requirements for M1,6 to M10 square thin nuts assigned to product grade B.

If, in special cases, nuts are to comply with specifications other than those given in this standard, e.g. regarding property class, these shall be selected in accordance with the relevant standards.

2 Dimensions

Thread size	M1,6	M2	M2,5	M3	(M3,5)	M4	M5	M6	M8	M10	
$P^{1)}$	0,35	0,4	0,45	0,5	0,6	0,7	0,8	1	1,25	1,5	
e min.	4	5	6,3	7	7,6	8,9	10,2	12,7	16,5	20,2	21,5
m max. = nominal size	1	1,2	1,6	1,8	2	2,2	2,7	3,2	4	5	
m min.	0,6	0,8	1,2	1,4	1,6	1,8	2,3	2,72	3,52	4,52	
s max. = nominal size	3,2	4	5	5,5	6	7	8	10	13	16 ²⁾	17
s min.	2,9	3,7	4,7	5,2	5,7	6,64	7,64	9,64	12,57	15,57	16,57
Mass (7,85 kg/dm ³) for 1000 units, in kg \approx	0,08	0,13	0,27	0,35	0,44	0,64	1,06	1,93	4,01	7,6	8,8

Use of size M3,5 (given in brackets) should be avoided where possible.

1) P = pitch of thread.

2) See clause 4.

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3 Technical delivery conditions

Material		Steel	Stainless steel	Non-ferrous metal
General requirements		As in DIN 267 Part 1.		
Thread	Tolerance	6H		
	As specified in	DIN 13 Part 15.		
Mechanical properties ²⁾	Property class (material)	Up to M 2,5: 11H; from M 3: 04.	A2-50	CuZn = copper-zinc alloy ¹⁾
	As specified in	DIN 267 Part 24 and ISO 898 Part 2.	DIN 267 Part 11.	DIN 267 Part 18.
Limit deviations, geometrical tolerances	Product grade	B (previously mg).		
	As specified in	ISO 4759 Part 1.		
Surface finish		As processed.	Bright.	Bright.
		DIN 267 Part 2 shall apply with regard to surface roughness. DIN 267 Part 9 shall apply with regard to electroplating. DIN 267 Part 10 shall apply with regard to hot dip galvanizing.		
Acceptance inspection		DIN 267 Part 5 shall apply with regard to the acceptance inspection.		
¹⁾ CuZn = CU2 or CU3, at the discretion of the manufacturer.				
²⁾ The use of other property classes or materials or of a particular grade of copper-zinc alloy shall be subject to agreement.				

4 Designation

Designation of an M4 square nut assigned to property class 04:

Square nut DIN 562 – M4 – 04

If the M10 nut shall be supplied with a width across flats of 16 mm, the width across flats (SW16) shall be added to the designation:

Square nut DIN 562 – M10 – SW16 – 04

Previous editions

DIN 562: 04.23, 09.41, 07.60, 03.63, 12.72, 02.85.

Standards referred to

DIN 13 Part 15	ISO metric screw threads; fundamental deviations and tolerances for screw threads from 1 mm diameter
DIN 267 Part 1	Fasteners; technical delivery conditions; general requirements
DIN 267 Part 2	Fasteners; technical delivery conditions; design and dimensional accuracy
DIN 267 Part 5	Fasteners; technical delivery conditions; acceptance inspection
DIN 267 Part 9	Fasteners; technical delivery conditions; electroplated components
DIN 267 Part 10	Fasteners; technical delivery conditions; hot-dip galvanized parts
DIN 267 Part 11	Fasteners; technical delivery conditions, with additions to ISO 3506; components made from corrosion-resistant stainless steels
DIN 267 Part 18	Fasteners; technical delivery conditions; components made from non-ferrous metals
DIN 267 Part 24	Fasteners; technical delivery conditions; property classes for nuts (hardness classes)
ISO 898 Part 2	Mechanical properties of fasteners; nuts with specified proof load values
ISO 4759 Part 1	Tolerances for fasteners; bolts, screws and nuts with thread diameters from 1,6 to 150 mm, product grades A, B and C

Amendments

In comparison with the February 1985 edition, tolerance zone h15 has been taken as the basis for calculating the minimum nut height, *m*.

International Patent Classification

F 16 B 37/00