UDC 621.882.342

September 1986

Knurled nuts with collar

DIN 466

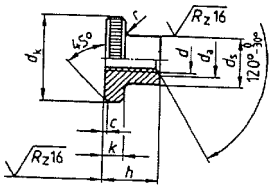
Rändelmuttern; hohe Form

Supersedes November 1970 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 Dimensions



Type RAA straight knurl, as specified in DIN 82.

Thread size d		M 1	M 1,2	M 1,4	M 1,6	M 2	M 2,5	M 3	(M 3,5)	M 4	M 5	M 6	M 8	M 10
P [1]		0,25	0,25	0,3	0,35	0,4	0,45	0,5	0,6	0,7	0,8	1	1,25	1,5
c	≈	Edges chamfered.					0,3	0,3	0,4	0,4	0,4	0,5	0,6	0,8
d_a	min.	1	1,2	1,4	1,6	2	2,5	3	3,5	4	5	6	8	10
	max.	1,15	1,4	1,6	1,84	2,3	2,9	3,45	4	4,6	5,75	6,75	8,75	10,8
d_k	Nominal size	5,5	6	7	7,5	9	11	12	14	16	20	24	30	36
	max.	5,74	6,24	7,29	7,79	9,29	11,35	12,35	14,35	16,35	20,42	24,42	30,42	36,5
	min.	5,26	5,76	6,71	7,21	8,71	10,65	11,65	13,65	15,65	19,58	23,58	29,58	35,5
d_s	max. = nominal size	2,8	3	3,5	3,8	4,5	5	6	7	8	10	12	16	20
	min.	2,55	2,75	3,2	3,5	4,2	4,7	5,7	6,64	7,64	9,64	11,57	15,57	19,48
h	max. = nominal size	3,5	4	4,7	5	5,3	6,5	7,5	8,5	9,5	11,5	15	18	23
	min.	3,2	3,7	4,4	4,7	5	6,14	7,14	8,14	9,14	11,07	14,57	17,57	22,48
k	max. = nominal size	1,5	1,5	2	2	2	2,5	2,5	3	3,5	4	5	6	8
	min.	1,25	1,25	1,75	1,75	1,75	2,25	2,25	2,75	3,2	3,7	4,7	5,7	7,64
r		0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	1	1	2	2
Mass (7,85 kg/dm³), in kg per 1000 units, approximately		0,357	0,445	0,765	0,9	1,3	2,2	3	4,78	7,19	13	24	46	88

The bracketed size M 3,5 should be avoided if possible.
[1] P = pitch of thread (coarse pitch thread).

Continued on pages 2 and 3

2 Technical delivery conditions

Material		Steel	Stainless steel	Non-ferrous metal
General requirements		As specified in DIN 267 Part 1.		
Thread	Tolerance class	For sizes up to and including M 1,4: 5H; from size M 1,6: 6H.		
	Standard	DIN 13 Part 15		
Mechanical properties [2]	Property class (material)	5	A1-50 or C4-50	CuZn = copper-zinc alloy [1]
	Standard	ISO 898 Part 2	DIN 267 Part 11	DIN 267 Part 18
Permissible dimensional deviations and deviations of form	Product grade	For sizes up to and including M 1,4: F; from size M 1,6: A.		
	Standard	DIN 267 Part 6; ISO 4759 Part 1		
Surface finish [3]		As processed.	Bright.	Bright.
		DIN 267 Part 20 shall apply with regard to permissible surface discontinuities. DIN 267 Part 9 shall apply with regard to electroplating. DIN 50 942 shall apply with regard to phosphating of metals.		
Acceptance inspection		DIN 267 Part 5 shall apply with regard to acceptance inspection. [4]		

1) CuZn = CU2 or CU3 (as specified in DIN 267 Part 18), at the manufacturer's discretion.
2) Other property classes or materials shall be subject to agreement.
3) R_z 25 and R_z 16 shall apply for the surface roughness, R_z 40 shall apply for thread flanks for sizes not exceeding M 5.
4) AQL (acceptable quality level) 1 shall apply for major characteristics and AQL 1,5 for minor characteristics, thread size d and the straight knurl being regarded as major characteristics, height h, collar diameter d_s and external diameter d_k as minor characteristics.

3 Designation

Designation of an M 5 knurled nut, assigned to property class 5:

Knurled nut DIN 466 – M 5 – 5

The DIN 4000 – 2 – 7 tabular layout of article characteristics shall apply to screws conforming to this standard.

Standards referred to

DIN	13 Part 15	ISO metric screw threads; fundamental deviations and tolerances for screw threads of 1 mm and larger
DIN	82	Straight knurls
DIN	267 Part 1	Fasteners; technical delivery conditions; general requirements
DIN	267 Part 5	Fasteners; technical delivery conditions; acceptance inspection (modified version of ISO 3269, 1984 edition)
DIN	267 Part 6	Fasteners; technical delivery conditions; types of finish and dimensional accuracy for product grade F
DIN	267 Part 9	Fasteners; technical delivery conditions; components with electroplated coatings
DIN	267 Part 11	Fasteners; technical delivery conditions (with additions to ISO 3506); corrosion-resistant stainless steel fasteners
DIN	267 Part 18	Fasteners; technical delivery conditions; components made of non-ferrous metals
DIN	267 Part 20	Fasteners; technical delivery conditions; surface discontinuities on nuts
DIN	4000 Part 2	Tabular layouts of article characteristics for bolts, studs and nuts
DIN	50 942	Phosphating of metals; principles, symbols and test methods
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 between 1,6 (inclusive) and 150 mm (inclusive) and product grades A, B and C

Previous editions

03.24, 10.43, 02.56, 06.63, 11.70.

Amendments

The following amendments have been made in comparison with the November 1970 edition.

a) The content of the standard has been editorially revised and aligned with the basic standards concerned.

b) The technical delivery conditions have been amended.

c) The previous design m as specified in DIN 267 Part 2 has been replaced by product grade F as specified in DIN 267 Part 6 and product grade A as specified in ISO 4759 Part 1. Tolerances have been included.

d) Sizes M 1,7, M 2,3 and M 2,6 have been deleted. However, to cater for documents already in existence and spare parts requirements, they can still be ordered in accordance with the November 1970 edition of the present standard.

International Patent Classification

F16B 37/00