

DIN 981

DIN

ICS 21.060.20

Supersedes
DIN 981:1993-02

**Rolling bearings –
Locknuts
English translation of DIN 981:2009-06**

Wälzlager –
Nutmuttern
Englische Übersetzung von DIN 981:2009-06

Roulements –
Écrous à encoches
Traduction anglaise de DIN 981:2009-06

Document comprises 12 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.



Contents

	Page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Symbols	4
4 Types, designations, dimensions	4
4.1 General.....	4
4.2 Types.....	5
4.3 Designations	6
4.4 Dimensions and symbols	6
5 Material and method of manufacture.....	9
6 Design	9
7 Application	10
Annex A (informative) Explanatory notes	11
Bibliography.....	12
Figures	
Figure 1 — Dimensions of KM . . , KML . . and HM . . . T locknuts (notation)	5
Figure 2 — Dimensions of HM . . . locknuts (notation)	6
Figure 3 — Locknut with lockwasher	10
Figure 4 — Locknut with locking clip	10
Tables	
Table 1 — Dimensions and symbols for locknuts KM . . , KML . . and HM . . . T.....	7
Table 2 — Dimensions and symbols for locknuts HM	8

Foreword

This standard has been prepared by Working Committee NA 118-01-02 AA *Kugellager und Spannlager einschließlich Teile, allgemeines Wälzlagerzubehör und Gehäuse* of the *Normenausschuss Wälz- und Gleitlager* (Rolling Bearings and Plain Bearings Standards Committee).

Amendments

This standard differs from DIN 981:1993-02 as follows:

- a) the standard has been completely revised;
- b) the tolerances for runout and perpendicularity ($S1$ and $S2$) have been brought into line with ISO 2982-2;
- c) the symbols have been largely brought into line with ISO 2982-2;
- d) in Table 1, dimension h has been replaced by A for nuts up to M 100 × 2;
- e) the HM T design has been moved from Table 2 to Table 1 as in ISO 2982-2;
- f) further information on the design has been added;
- g) information on masses has been deleted from Tables 1 and 2;
- h) the normative references have been updated.

Previous editions

DIN 981: 1973-01, 1977-05, 1983-01, 1993-02

1 Scope

This standard specifies dimensions and symbols for locknuts.

Locknuts according to this standard, in combination with DIN 5406 lockwashers and locking clips, are primarily used for adapter sleeves conforming to DIN 5415.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

DIN 103-3, *ISO metric trapezoidal screw thread – Allowances and tolerances for trapezoidal screw threads of general purpose*

DIN 5406, *Rolling bearings — Lockwashers — Safety plate, lockclip*

DIN 5415, *Rolling bearings — Adapter sleeves*

DIN ISO 965-1, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

DIN ISO 13715, *Technical drawings — Edges of undefined shape — Vocabulary and indication on drawings*

3 Symbols

For the purposes of this document, the following symbols apply.

<i>A</i>	Slot bottom spacing
<i>B</i>	Locknut width
<i>b</i>	Width of slot in locknut
<i>d</i> ₁	External diameter of locknut clamp face
<i>d</i> ₂	External diameter of locknut
<i>G</i>	Designation of screw thread
<i>h</i>	Depth of slot in locknut
<i>S</i> ₁	Runout tolerance of locknut clamp face
<i>S</i> ₂	Perpendicularity tolerance of locknut clamp face

4 Types, designation, dimensions

4.1 General

The designs shown are for illustrative purposes only; however, the dimensions of locknuts shall be as specified.

The nut thread shall be countersunk on both sides at 90° to 120° to the minor diameter.