

DIN 471

DIN

ICS 21.060.60; 21.120.10

Supersedes
DIN 471:1981-09

**Retaining rings for shafts –
Normal type and heavy type
English translation of DIN 471:2011-04**

Sicherungsringe (Haltringe) für Wellen –
Regelausführung und schwere Ausführung
Englische Übersetzung von DIN 471:2011-04

Anneaux d'arrêt pour arbres –
Type standard et type robuste
Traduction anglaise de DIN 471:2011-04

Document comprises 24 pages

Translation by DIN-Sprachendienst.

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



A comma is used as the decimal marker.

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Foreword

This standard has been prepared by Working Committee NA 067-00-09 AA *Verbindungselemente ohne Gewinde* of the *Normenausschuss Mechanische Verbindungselemente* (Fasteners Standards Committee).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. DIN shall not be held responsible for identifying any or all such patent rights.

Amendments

This standard differs from DIN 471:1981-09 as follows:

- a) normative references have been updated;
- b) the specifications for load bearing capacity, detaching speed and assembly have been revised;
- c) the tolerances on radial run-out have been deleted from Figure 2 (formerly Figure 3);
- d) in Clause 10, Figure 11 (formerly Figure 14) "Taper assembly" has been revised;
- e) Figure 10 "Design of groove base" has been included in 10.3;
- f) examples of designation for retaining rings with corrosion protection have been included;
- g) the standard has been editorially revised.

Previous editions

DIN 471: 1941-12, 1942-11, 1952-01, 1954-01, 1981-09

DIN 471 and DIN 472 Supplement 1: 1945-01, 1954x-03

DIN 471-1: 1965-03

DIN 471-2: 1965-03

DIN 995: 1970-01

1 Scope

This standard specifies requirements for retaining rings for shafts and lays down design details for the grooves into which such rings are fitted.

NOTE Retaining rings are used to hold components or assemblies (e.g. rolling bearings) on shafts and are suitable for the transmission of axial forces.

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 988, *Shim rings and supporting rings*

DIN 5254, *Pliers for retaining rings for shafts*

DIN 50938, *Black oxide coatings on iron or steel — Requirements and test methods*

DIN EN 10132-4, *Cold-rolled narrow steel strip for heat-treatment — Technical delivery conditions — Part 4: Spring steels and other applications*

DIN EN 12476, *Phosphate conversion coatings of metals — Method of specifying requirements*

DIN EN ISO 3269, *Fasteners — Acceptance inspection*

DIN EN ISO 4042, *Fasteners — Electroplated coatings*

DIN EN ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

DIN EN ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)*

DIN EN ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

DIN EN ISO 18265, *Metallic materials — Conversion of hardness values*

DIN ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*