

DIN 580



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Supersedes
DIN 580:2003-08

Lifting eye bolts
English translation of DIN 580:2010-09

Ringschrauben
Englische Übersetzung von DIN 580:2010-09

Vis à anneau
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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 067-00-08 AA *Verbindungselemente mit Sonderformen und aus Kunststoff* 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 580:2003-08 as follows:

- a) the scope has been specified in more detail;
- b) references have been updated;
- c) the technical delivery conditions have been completely revised;
- d) tolerances have been added in Table 1;
- e) the minimum breaking load for angular loading at 90° has been specified in Table 3;
- f) the lifting capacity for angular loading at 90° has been specified in Table 4 (previously Table A.1);
- g) Figure 2b) illustrating the testing principle has been added;
- h) Annex A dealing with the lifting capacity has been revised and integrated in the main text;
- i) the user information is now covered in Annex A (previously Annex B).

Previous editions

DIN 580-1: 1926-01, 1942-01, 1956x-02

DIN 581-1: 1926-01, 1942-01

DIN 580: 1970-09, 1972-03, 2003-08

1 Scope

This standard specifies properties for lifting eye bolts made of steel and stainless steel and provides guidance on their safe use as part of lifting appliances and slings.

Eye bolts conforming to this standard are suitable for use at temperatures ranging from $-20\text{ }^{\circ}\text{C}$ to $+200\text{ }^{\circ}\text{C}$ without a reduction in their lifting capacity.

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 76-1, *Thread run-outs and thread undercuts — Part 1: For ISO metric threads in accordance with DIN 13-1*

DIN 962, *Bolts, screws, studs and nuts — Designation, types and finishes*

DIN EN 818-4, *Short link chain for lifting purposes — Safety — Part 4: Chain slings — Grade 8*

DIN EN 10084, *Case hardening steels — Technical delivery conditions*

DIN EN 10243-1, *Steel die forgings — Tolerances on dimensions — Part 1: Drop and vertical press forgings*

DIN EN 10254, *Steel closed die forgings — General technical delivery conditions*

DIN EN 10263-5, *Steel rod, bars and wire for cold heading and cold extrusion — Part 5: Technical delivery conditions for stainless steel*

DIN EN 26157-1, *Fasteners — Surface discontinuities — Part 1: Bolts, screws and studs subject to general requirements*

DIN EN 26157-3, *Fasteners — Surface discontinuities — Part 3: Bolts, screws and studs subject to special requirements*

DIN EN ISO 643, *Steels — Micrographic determination of the apparent grain size*

DIN EN ISO 3269, *Fasteners — Acceptance inspection*

DIN EN ISO 3506-1, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs*

DIN EN ISO 4042, *Fasteners — Electroplated coatings*

DIN EN ISO 4753, *Fasteners — Ends of parts with external metric ISO thread*

DIN EN ISO 10684, *Fasteners — Hot dip galvanized coatings*

DIN EN ISO 16048, *Passivation of corrosion-resistant stainless steel fasteners*

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

DIN ISO 965-2, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads; medium quality*