

**DIN EN ISO 10684**

ICS 21.060.01; 25.220.40

Supersedes  
DIN EN ISO 10684:2009-09

**Fasteners –**  
**Hot dip galvanized coatings (ISO 10684:2004 + Cor. 1:2008)**  
**English translation of DIN EN ISO 10684:2011-09**

Verbindungselemente –  
 Feuerverzinkung (ISO 10684:2004 + Cor. 1:2008)  
 Englische Übersetzung von DIN EN ISO 10684:2011-09  
 Éléments de fixation –  
 Revêtements de galvanisation à chaud (ISO 10684:2004 + Cor. 1:2008)  
 Traduction anglaise de DIN EN ISO 10684:2011-09

Document comprises 27 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.*

## National foreword

This standard has been prepared by Technical Committee CEN/TC 185 “Threaded and non-threaded mechanical fasteners and accessories” (Secretariat: DIN, Germany) in collaboration with Technical Committee ISO/TC 2 “Fasteners”.

The responsible German body involved in its preparation was the *Normenausschuss Mechanische Verbindungselemente* (Fasteners Standards Committee), Working Committee NA 67-00-06 AA *Oberflächen-schichten von Verbindungselementen*.

This standard is identical to the European Standard EN ISO 10684:2004. It incorporates the International Standard ISO 10684:2004 which has been adopted without any modifications.

The DIN Standards corresponding to the International Standards referred to in this document are as follows:

ISO 898-1	DIN EN ISO 898-1
ISO 898-2	DIN EN 20898-2
ISO 965-1	DIN ISO 965-1
ISO 965-2	DIN ISO 965-2
ISO 965-3	DIN ISO 965-3
ISO 965-4	DIN ISO 965-4
ISO 965-5	DIN ISO 965-5
ISO 1460	DIN EN ISO 1460
ISO 1461	DIN EN ISO 1461
ISO 2064	DIN EN ISO 2064
ISO 2178	DIN EN ISO 2178

## Amendments

This standard differs from DIN 267-10:1988-01 as follows:

- a) the scope of the standard has been modified;
- b) terms and definitions have been included;
- c) requirements for the raw material have been included;
- d) requirements for the surface condition have been included;
- e) requirements for the zinc used have been included;
- f) the hot dip galvanizing procedure has been specified;
- g) the thread tolerance of undersize threaded bolts, screws and studs has been changed;
- h) the thread tolerance of nuts tapped oversize has been changed;
- i) the marking of undersize threaded bolts, screws and studs and of nuts tapped oversize has been specified;
- j) for undersize threaded bolts, screws and studs, mechanical properties in accordance with ISO 898-1 (except for sizes M8 and M10) have been specified;

- k) for nuts tapped oversize, mechanical properties in accordance with ISO 898-2 have been specified (except for sizes M8 and M10);
- l) requirements for the zinc coating have been specified;
- m) ordering requirements have been specified.

Compared with DIN EN ISO 10684:2004-11, the following corrections have been made on the basis of Corrigendum EN ISO 10684:2004/AC:2009:

- a) in Table 1, column 12, penultimate line, “398” has been replaced by “298”;
- b) (German version only) in Subclause A.1, 1<sup>st</sup> paragraph, 2<sup>nd</sup> line, “12” has been replaced by “10”.

Compared with DIN EN ISO 10684:2009-09, the following corrections have been made to the German version only and therefore do not affect the English text:

- a) in Subclause 5.2, “= 320 HV” has been replaced by “≥ 320 HV”;
- b) in Clause 7, “= M12” has been replaced by “≥ M12”;
- c) in Subclause A.1, the references to “6.2.1 and 6.2.2” have been replaced by “6.2.2 and 6.2.3”;
- d) in Annex F, 1<sup>st</sup> paragraph, “ISO 965” has been replaced by “ISO 965-5”;
- e) in Annex F, a), the 2<sup>nd</sup> sentence has been corrected;
- f) the standard has been editorially revised.

#### **Previous editions**

DIN 267-10: 1977-03, 1988-01

DIN EN ISO 10684: 2004-11, 2009-09

## National Annex NA (informative)

### Bibliography

DIN EN 20898-2, *Mechanical properties of fasteners — Part 2: Nuts with specified proof load values — Coarse thread*

DIN EN ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs*

DIN EN ISO 1460, *Metallic coatings — Hot dip galvanized coatings on ferrous materials — Gravimetric determination of the mass per unit area*

DIN EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods*

DIN EN ISO 2064, *Metallic and other non-organic coatings — Definitions and conventions concerning the measurement of thickness*

DIN EN ISO 2178, *Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method*

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*

DIN ISO 965-3, *ISO general purpose metric screw threads — Tolerances — Part 3: Deviations for constructional threads*

DIN ISO 965-4, *ISO general purpose metric screw threads — Tolerances — Part 4: Limits of sizes for hot-dip galvanized external screw threads to mate with internal screw threads tapped with tolerance position H or G after galvanizing*

DIN ISO 965-5, *ISO general purpose metric screw threads — Tolerances — Part 5: Limits of sizes for internal screw threads to mate with hot-dip galvanized external screw threads with maximum size of tolerance position h before galvanizing*