

DIN 7968



ICS 21.060.10

Supersedes  
DIN 7968:2007-07

**Hexagon fit bolts with hexagon nut for steel structures,  
English translation of DIN 7968:2017-08**

Sechskant-Passschrauben mit Sechskantmutter für Stahlkonstruktionen,  
Englische Übersetzung von DIN 7968:2017-08

Corps de boulon ajustables à tête hexagonale avec écrou hexagonal pour constructions  
métalliques,  
Traduction anglaise de DIN 7968:2017-08

Document comprises 11 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.*

Contents

	Page
Foreword .....	3
1 <b>Scope</b> .....	4
2 <b>Normative references</b> .....	4
3 <b>Dimensions</b> .....	5
4 <b>Technical delivery conditions</b> .....	7
5 <b>Marking</b> .....	8
6 <b>Designation</b> .....	8
Annex A (normative) <b>Grip length and clamp length</b> .....	9
Annex B (informative) <b>Mass</b> .....	11

## Foreword

This standard has been prepared by Working Committee NA 067-00-07 AA “Structural bolting” of *DIN-Normenausschuss Mechanische Verbindungselemente* (DIN Standards Committee Fasteners).

The DIN 4000-160-7 tabular layout of product properties applies to hexagon fit bolts covered in this standard.

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 7968:2007-07 as follows:

- a) the category “ $c_{\min}$ ” has been added to Table 1;
- b) in Table 2, “Technical delivery conditions and reference standards”, DIN ISO 8992 has been replaced by DIN EN 15048-1 and DIN EN 15048-2 has been added in the table and in footnote a with regard to technical delivery conditions;
- c) the term clamp length  $l_k$  has been replaced by grip length  $t_s$  and clamp length  $\Sigma t$ ;
- d) normative references have been updated and the standard has been editorially revised.

## Previous editions

DIN 7968: 1955-07, 1956-10, 1963-03, 1971-01, 1989-10, 1999-12, 2007-07

## **1 Scope**

This standard specifies dimensions and technical delivery conditions for M12 to M30 hexagon fit bolts with hexagon nut of product grade C for use in structural steel bolting.

Fasteners according to this standard meet all the requirements for non-preloaded structural bolting assemblies as in DIN EN 15048-1.

This standard also specifies the nuts and washers to be used with these fasteners.

## **2 Normative references**

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

DIN 13-20, *General purpose ISO metric screw threads — Part 20: Limits of sizes for coarse pitch threads with the preferred tolerance classes — Nominal sizes from 1 mm to 68 mm*

DIN 4000-160, *Tabular layout of product properties — Part 160: Fasteners with external thread*

DIN 7989-1, *Washers for steel structures — Part 1: Product grade C*

DIN 7989-2, *Washers for steel structures — Part 2: Product grade A*

DIN EN 15048-1, *Non-preloaded structural bolting assemblies — Part 1: General requirements*

DIN EN 15048-2, *Non-preloaded structural bolting assemblies — Part 2: Usability*

DIN EN ISO 286-1, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 1: Basis of tolerances, deviations and fits*

DIN EN ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread*

DIN EN ISO 898-2, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 2: Nuts with specified property classes — Coarse thread and fine pitch thread*

DIN EN ISO 3269, *Fasteners — Acceptance inspection*

DIN EN ISO 4032, *Hexagon regular nuts (style 1) — Product grades A and B*

DIN EN ISO 4034, *Hexagon regular nuts (style 1) — Product grade C*

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

DIN EN ISO 4759-1, *Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C*

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

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*