
French standard

NF EN ISO 898-1
3 May 2013

Classification index: E 25-100-1

ICS: 21.060.10

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

F : Caractéristiques mécaniques des éléments de fixation en acier au carbone et en acier allié — Partie 1 : Vis, goujons et tiges filetées de classes de qualité spécifiées — Filetages à pas gros et filetages à pas fin

D : Mechanische Eigenschaften von Verbindungselementen aus Kohlenstoffstahl und legiertem Stahl — Teil 1: Schrauben mit festgelegten Festigkeitsklassen — Regelgewinde und Feingewinde

French standard approved

by decision of the Director General of AFNOR.

Replaces the approved standard NF EN ISO 898-1 of June 2009.

Correspondence

The European standard EN ISO 898-1:2013 has the status of French standard and reproduces in full the international standard ISO 898-1:2013.

Summary

This document applies to partially threaded screws, fully threaded screws, threaded bolts and studs designated in France by the generic term “metal screws” and referred to as screws and studs in the rest of the standard.

It specifies mechanical properties of products made of carbon steel and alloy steel and defines the quality classes, marking, testing programs and testing methods.

The mechanical properties of nuts are covered in NF EN ISO 898-2.

Descriptors

Technical International Thesaurus: fasteners, screws, studs, alloy steels, designation, quality classes, materials specifications, tests, mechanical tests, tension tests, hardness tests, decarburization, marking.

Modifications

With respect to the replaced document:

- clarification of the wording of the document;
 - addition of the quality class 6.8 in 9.9.5 and the quality class 12.9 in 9.11.3.4 ;
 - Table 3: modification of Brinell hardness values for quality classes 8.8, 9.8, 10.9 and addition and modification of requirements for surface hardness for quality classes 10.9 and 12.9/12.9 (Table 3, § 9.11.1 and § 9.11.3.4).
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Corrections

Standards

Standards are designed to serve as a basis in relations between economic, scientific, technical and social partners.

By nature, application of a standard is voluntary. When stipulated in a contract, it is binding on the parties. Legislation may require all or part of a standard to become compulsory.

The standard is a document defined by consensus within a standardisation body involving representatives of all stakeholders. It is submitted for public consultation prior to adoption.

The standard is regularly reviewed to assess its appropriateness over time.

Any standard is considered to be effective as from the date presented on the first page.

Understanding standards

The reader's attention is drawn to the following points:

Only the verbal form **shall** is used to express one or more requirements that shall be satisfied in order to comply with this document. Such requirements may be contained in the body of the standard or in a so-called "normative" annex. For test methods, the use of the imperative corresponds to a requirement.

Expressions involving the verbal form **should** are used to express a possibility that, while preferred, is not actually necessary in order to comply with this document. The verbal form **may** is used to express practical, but not mandatory advice or suggestions, or permission.

Furthermore, this document may provide additional information aimed at making certain elements easier to understand or use, or at clarifying how such elements are applied, but without actually defining a requirement. These elements are presented as **notes or informative annexes**.

Standardisation commission

Acting within a given field of activity, a standardisation commission features the necessary expertise for preparing French standards and defining France's positions in European and international draft standards. The commission may also prepare experimental standards and technical reports.

If you would like to provide feedback on this document, make suggested changes or take part in the document's revision, write to "norminfo@afnor.org".

The composition of the standardisation commission that prepared this document is provided below. If experts are representing a body other than the body to which they habitually belong, this information is presented using the following convention: body of membership (body represented).

English Version

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 (ISO 898-1:2013)

Caractéristiques mécaniques des éléments de fixation en acier au carbone et en acier allié - Partie 1: Vis, goujons et tiges filetées de classes de qualité spécifiées - Filetages à pas gros et filetages à pas fin (ISO 898-1:2013)

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This European Standard was approved by CEN on 14 January 2013.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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