DIN EN ISO 898-2

ICS 21.060.20

Supersedes
DIN EN 20898-2:1994-02 and
DIN EN ISO 898-6:1996-02

Mechanical properties of fasteners made of carbon steel and alloy steel – Part 2: Nuts with specified property classes – Coarse thread and fine pitch thread (ISO 898-2:2012); English version EN ISO 898-2:2012, English translation of DIN EN ISO 898-2:2012-08

Mechanische Eigenschaften von Verbindungselementen aus Kohlenstoffstahl und legiertem Stahl –
Teil 2: Muttern mit festgelegten Festigkeitsklassen –
Regelgewinde und Feingewinde (ISO 898-2:2012);
Englische Fassung EN ISO 898-2:2012,
Englische Übersetzung von DIN EN ISO 898-2:2012-08

Caractéristiques mécaniques des éléments de fixation en acier au carbone et en acier allié –
Partie 2: Écrous de classes de qualité spécifiées –
Filetages à pas gros et filetages à pas fin (ISO 898-2:2012);
Version anglaise EN ISO 898-2:2012,
Traduction anglaise de DIN EN ISO 898-2:2012-08

Document comprises 28 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 ISO/TC 2 “Fasteners” in collaboration with Technical Committee CEN/TC 185 “Fasteners” (both secretariats are held by DIN, Germany).

The responsible German body involved in its preparation was the *Normenausschuss Mechanische Verbindungselemente* (Fasteners Standards Committee), Working Committee NA 067-00-03 AA *Verbindungselemente mit metrischem Innengewinde.*

DIN EN ISO 898 consists of the following parts, under the general title *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*

— *Part 2: Nuts with specified property classes — Coarse thread and fine pitch thread*

— *Part 5: Set screws and similar threaded fasteners with specified hardness classes — Coarse thread and fine pitch thread*

— *Part 7: Torsional test and minimum torques for bolts and screws with nominal diameters 1 mm to 10 mm*[*)]

The DIN Standards corresponding to the International Standards referred to in Clause 2 of this document are as follows:

ISO 68-1	DIN ISO 68-1
ISO 261	DIN ISO 261
ISO 262	DIN ISO 262
ISO 286-2	DIN ISO 286-2
ISO 898-1	DIN EN ISO 898-1
ISO 2320	DIN EN ISO 2320
ISO 4032	DIN EN ISO 4032
ISO 4033	DIN EN ISO 4033
ISO 6157-2	DIN EN ISO 6157-2
ISO 6506-1	DIN EN ISO 6506-1
ISO 6507-1	DIN EN ISO 6507-1
ISO 6508-1	DIN EN ISO 6508-1
ISO 6892	DIN EN 10002-1
ISO 7500-1	DIN EN ISO 7500-1
ISO 10684	DIN EN ISO 10684
ISO 16047	DIN EN ISO 16047
ISO 16426	DIN EN ISO 16426

*) During the next revision of the standard, the title of Part 7 will be harmonized with the titles of the other standards of this series.

Amendments

This standard differs from DIN EN 20898-2:1994-02 and DIN EN ISO 898-6:1996-02 as follows:

a) the text of ISO 898-2:2012 has been adopted without any modification;

b) the number of the standard has been changed;

c) the scope has been revised, M5 has been specified as the minimum nominal diameter;

d) nominal diameters M3, M3,5 and M4 have been deleted;

e) Table 1 has been supplemented by nut style 0 (thin nuts) and rendered more precise taking into account the ratio of the minimum height to the diameter;

f) property class 4 has been deleted;

g) property class 10 has been added for style 2;

h) for property classes 5 and 6, the maximum carbon content has been increased;

i) in Table 5, the proof load values for property classes 8 and 12 are no longer divided into style 1 and style 2; the lower values have been deleted;

j) Table 6 relating to hardness properties has been revised, stress under proof load has been deleted and the heat treatment condition is now given in Table 3;

k) specifications relating to inspection have been included in Clause 8;

l) the previously normative specifications related to the thread stripping load are now dealt with in Annex A (informative);

m) the proof load test has been rendered more precise;

n) the hardness test is now given in more detail, taking into account the heat treatment condition;

o) specifications for marking have been extended and rendered more precise.

Previous editions

DIN 266: 1931x-03
DIN 589: 1931-07, 1934-01
DIN kr 550: 1936-03
DIN 267-1: 1937-04
DIN 267-2: 1937-04
DIN 267: 1940-06, 1943-01, 1954-01, 1960-12
DIN 267-4: 1968-05, 1971-10, 1983-08
DIN 267-8: 1968-04, 1971-10
DIN 267-23: 1983-08
DIN ISO 898-2: 1981-03
DIN ISO 898-6: 1990-03, 1990-06
DIN EN 20898-2: 1994-02
DIN EN 20898-6: 1992-10
DIN EN ISO 898-6: 1996-02

National Annex NA
(informative)

Bibliography

DIN EN 10002-1, *Metallic materials — Tensile testing — Part 1: Method of testing at ambient temperature*

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 2320, *Prevailing torque type steel nuts — Mechanical and performance properties*

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

DIN EN ISO 4033, *Hexagon nuts, style 2 — Product grades A and B*

DIN EN ISO 6157-2, *Fasteners — Surface discontinuities — Part 2: Nuts*

DIN EN ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method*

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 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

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

DIN EN ISO 16047, *Fasteners — Torque/clamp force testing*

DIN EN ISO 16426, *Fasteners — Quality assurance system*

DIN ISO 68-1, *ISO general purpose metric screw threads — Basic profile — Part 1: Metric screw threads*

DIN ISO 261, *ISO general purpose metric screw threads — General plan*

DIN ISO 262, *ISO general purpose metric screw threads — Selected sizes for screws, bolts and nuts*

DIN ISO 286-2, *ISO system of limits and fits — Tables of standard tolerance grades and limit deviations for holes and shafts*