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Prevailing torque type steel nuts — Mechanical and performance properties

Écrous autofreinés en acier — Caractéristiques mécaniques et performances

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 2320 was prepared by Technical Committee ISO/TC 2, *Fasteners*, Subcommittee SC 1, *Mechanical properties of fasteners*.

This fourth edition cancels and replaces the third edition (ISO 2320:1997), which has been technically revised. It also incorporates the Technical Corrigendum ISO 2320:1997/Cor.1:2006.

Prevailing torque type steel nuts — Mechanical and performance properties

1 Scope

This International Standard specifies the mechanical and performance properties for prevailing torque type steel nuts when tested at an ambient temperature range of +10 °C to +35 °C. It includes a single test to determine the prevailing torque properties (performance properties) and/or the torque/clamp force properties.

This International Standard applies to prevailing torque all metal type nuts and prevailing torque non-metallic insert type nuts:

a) with triangular ISO thread according to ISO 68-1;

b) with diameter/pitch combination according to ISO 261 and ISO 262;

c) with coarse pitch thread M3 to M39 and mechanical properties according to ISO 898-2;

d) with fine pitch thread M8×1 to M39×3 and mechanical properties according to ISO 898-6;

e) within the temperature range of −50 °C to +150 °C for prevailing torque all metal type nuts;

NOTE 1 See Clause 7, paragraph 3.

f) within the temperature range of −50 °C to +120 °C for prevailing torque non-metallic insert type nuts.

NOTE 2 See Clause 7, paragraph 4.

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.

ISO 273:1979, *Fasteners — Clearance holes for bolts and screws*

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

ISO 898-2, *Mechanical properties of fasteners — Part 2: Nuts with specified proof load values — Coarse thread*

ISO 898-6, *Mechanical properties of fasteners — Part 6: Nuts with specified proof load values — Fine pitch thread*

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*

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