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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 889.2-2016

**Prevailing torque type hexagon nuts (with non-metallic insert),
style1 -- Fine pitch thread
(English Translation)**

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Foreword

This Part of GB/T 889 is one national standard of "Prevailing torque type hexagon nuts" series. This series includes.

- GB/T 889.1, Prevailing torque type hexagon nuts (with non-metallic insert), style 1;
- GB/T 889.2, Prevailing torque type hexagon nuts (with non-metallic insert), Style 1--Fine pitch thread;
- GB/T 6172.2, Prevailing torque type hexagon thin nuts (with non-metallic insert);
- GB/T 6182, Prevailing torque type hexagon nuts (with non-metallic insert), style 2;
- GB/T 6183.1, Prevailing torque type hexagon nuts with flange (with non-metallic insert), style 2;
- GB/T 6183.2, Prevailing torque type hexagon nuts with flange (with non-metallic insert) with fine pitch thread;
- GB/T 6184, Prevailing torque type all-metal hexagon nuts, style 1;
- GB/T 6185.1, Prevailing torque type hexagon nuts with flange (with non-metallic insert), style 2;
- GB/T 6185.2, Prevailing torque type all-metal hexagon nuts with flange, style 2 - Fine pitch thread;

- GB/T 6187.1, Type 2 all-metal hexagon nuts with flange;
- GB/T 6187.2, Prevailing torque type all-metal hexagon nuts with flange with fine pitch thread.

This Part is the second part of GB/T 889.

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 889.2-2000 Prevailing torque type hexagon nuts (with non-metallic insert), style 1 - Fine pitch thread. Compared with GB/T 889.2-2000, the main technical changes are as follows.

- deleted "If other technical requirements are required,... select among (such as GB/T 3098.9 and GB/T 3103.1)" (Clause 1 of Edition 2000);
- added. "NOTE 2 Because the fine tooth thread nut height is insufficient, the nut thread trip probability is higher, therefore, it may choose GB/T 618." (Clause 1);
- unified reference thread standards as GB/T 193, GB/T 9145 (Clause 2);
- modified mechanical performance grade to. 8 mm $\leq$ D $\leq$ 16 mm. 6, 8 (QT),

10 (QT); 16 mm < D $\leq$ 36 mm. 6 (QT), 8 (QT), 10 (QT) (Table 2);

- added QT - Quenching and tempering in mechanical properties (Table 2);
- specified that the reference standards for mechanical properties are GB/T 3098.2, GB/T 3098.9 (Table 2);
- added that electroless zinc coating technology requirements shall be according to GB/T 5267.2 (Table 2);
- in marks, the surface treatment shall be only allowed to omit. the surface is not treated, instead of surface galvanized passivation (5.2).

This Standard is modified on the basis of adopting ISO 10512.2012 Prevailing torque type hexagon regular nuts (with non-metallic insert) with metric fine pitch thread - Property classes 6, 8 and 10 (English version).

Compared with ISO 10512.2012, the technical differences and reasons in this Standard are as follows.

- deleted "If other technical requirements are required,... select in ISO

2320 and ISO 4759-1" (Clause 1) specified in ISO 10512 because it does

not belong to the content specified in this Part;

- in normative references, used China standards to replace International standards (see Clause 2); added GB/T 6171 (Clause 1), GB/T 6182 (Clause 1), GB/T 90.2 (Table 2) and GB/T 1237 (5.1) as reference standards; deleted ISO 724 as reference standard so as to comply with basic China standards of fasteners;
- "M36x2" specified in ISO 10512 was a printing error so it remained "M36x2" of the previous version (Table 1);
- modified mechanical performance grade to. 8 mm $\leq$ D $\leq$ 16 mm. 6, 8 (QT),

10 (QT); 16 mm < D $\leq$ 36 mm. 6 (QT), 8 (QT), 10 (QT) (Table 2) to expand

the standard's application scope;

- to implement the basic standards, added QT - Quenching and tempering (Table 2);

Prevailing torque type hexagon nuts (with non-metallic insert), style 1 - Fine pitch thread

1 Scope

This Part of GB/T 889 specifies type sizes, technical conditions and marks of prevailing torque type hexagon nuts (with non-metallic insert), style 1 - fine pitch thread.

This Standard is applicable to prevailing torque type hexagon nuts (with non-metallic insert), style 1 - fine pitch thread of which thread nominal diameters are D = 8 mm ~ 36 mm, performance grades are 6, 8 and 10, the product grades are A and B. Grade A is used for nuts of which D $\leq$ 16 mm; Grade B is used for

nuts of which $D > 16$ mm.

NOTE 1 This kind of nut is equivalent to GB/T 6171 plus the effective torque part.

NOTE 2 Because the fine tooth thread nut height is insufficient, the nut thread trip probability is higher, therefore, it may choose GB/T 6182.

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.

GB/T 90.1, Fasteners--Acceptance inspection (GB/T 90.1-2002, ISO 3269.2000, IDT);

GB/T 90.2, Fasteners--Marking and packaging;

GB/T 193, General purpose metric screw threads - General plan (GB/T 193-2003, ISO 261.1998, MOD);

GB/T 1237, Designation system for fasteners (GB/T 1237-2000, eqv ISO 8991.1986);

GB/T 3098.2, Mechanical properties of fasteners - Nuts (GB/T 3098.2-2015, ISO 898-2.2012, MOD);

GB/T 3098.9, Mechanical properties of fasteners - Prevailing torque type steel nuts (GB/T 3098.9-2010, ISO 2320.2008, IDT)

GB/T 3103.1, Tolerances for fasteners- Bolts, screws and nuts (GB/T 3103.1-2002, idt ISO 4759-1.2000);

GB/T 5267.1, Fasteners - Electroplated Coatings (GB/T 5267.1-2002, ISO 4042.1999, IDT);

GB/T 5267.2, Fasteners - Non-electrolytically applied zinc flake coatings (GB/T 5267.2-2002, ISO 10683.2000, IDT);

GB/T 5276, Fasteners - Bolts, screws, studs and nuts - Symbols and descriptions of dimensions (GB/T 5276-2015, ISO 225.2010, MOD);