SLOVENSKI STANDARD
SIST EN 2882:2009

01-junij-2009

Aeronavtika - Matice, ġestrobe, samozapiralne, z ugreznjeno in robljeno podloġko, iz jekla, prevleḷene s kadmijem, namazane z MoS2 - Klasifikacija: 1100 MPa (pri temperaturi okolice)/235 ĆC

Aerospace series - Nuts, hexagonal, self-locking, with counterbore and captive washer, in steel, cadmium plated, MoS2 lubricated - Classification: 1 100 MPa (at ambient temperature) / 235 °C

Luft-und Raumfahrt - Sechskantmuttern, selbstsichernd, mit Aussenkung und Bördelscheibe, aus Stahl, verkadmet, MoS2 geschmiert - Klasse: 1 100 MPa (bei Raumtemperatur) / 235 °C

Série aérospatiale - Ecrous hexagonaux, à freinage interne, avec chambrage et rondelle captive, en acier, cadmiés, lubrifiés MoS2 - Classification : 1 100 MPa (à température ambiante) / 235 °C

Ta slovenski standard je istoveten z: **EN 2882:2006**

ICS:

49.030.30 Matice Nuts

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EUROPEAN STANDARD
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EN 2882

July 2006

ICS 49.030.30

English Version

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This European Standard was approved by CEN on 20 April 2006.

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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 Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This European Standard (EN 2882:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2007, and conflicting national standards shall be withdrawn at the latest by January 2007.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies characteristics for hexagon nuts, with counterbore and captive washer, with a self-locking feature achieved by forming the upper portion out-of-round, in steel, cadmium plated, MoS_2 lubricated, classification 1 100 MPa [1)] / 235 °C [2)]

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 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts.*

ISO 5858, *Aerospace — Nuts, self-locking, with maximum operating temperature less than or equal to 425 °C — Procurement specification.*

ISO 8538, *Aerospace — Nuts, hexagonal, self-locking, with counterbore and captive washer, with MJ threads, classifications: 1 100 MPa (at ambient temperature)/235 °C, 1 100 MPa (at ambient temperature)/315 °C and 1 100 MPa (at ambient temperature)/425 °C — Dimensions.*

ISO 8788, *Aerospace — Nuts, metric — Tolerances of form and position.*

EN 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength ≤ 1 450 MPa, copper, copper alloys and nickel alloys.*

EN 2424, *Aerospace series — Marking of aerospace products.*

EN 2491, *Aerospace series — Molybdenum disulphide dry lubricants — Coating methods.*

EN 2543, *Aerospace series — Steel FE-PL43S — Annealed — Sheet and strip — 0,3 ≤ a ≤ 2 mm — for prevailing torque nuts.* [3)]

EN 3329, *Aerospace series — Steel FE-PL45 — Annealead — Sheet and strip — 0,3 ≤ a ≤ 2 mm — for prevailing torque nuts.* [3)]

EN 3330, *Aerospace series — Steel FE-PL45 — Annealed — Bar and wire — De ≤ 40 mm — for prevailing torque nuts.* [3)]

EN 9100, *Aerospace series — Quality management systems — Requirements (based on ISO 9001:2000) and Quality systems — Model for quality assurance in design, development, production, installation and servicing (based on ISO 9001:1994).*

EN 9133, *Aerospace series — Quality management systems — Qualification Procedure for aerospace standard parts.*

1) Corresponds to strength class of the associated bolt, the 100 per cent load of which it is able to withstand, when tested at ambient temperature, without breaking or cracking.

2) Maximum temperature that the nut is able to withstand, without permanent alteration of its original characteristics, after ambient temperature has been restored. The maximum temperature is conditioned by the cadmium plating.

3) Published as ASD Prestandard at the date of publication of this standard.

3 Required characteristics

3.1 Configuration – Dimensions – Masses

See Figure 1 and Table 1.

3.2 Materials

Nut : EN 3329 or EN 3330

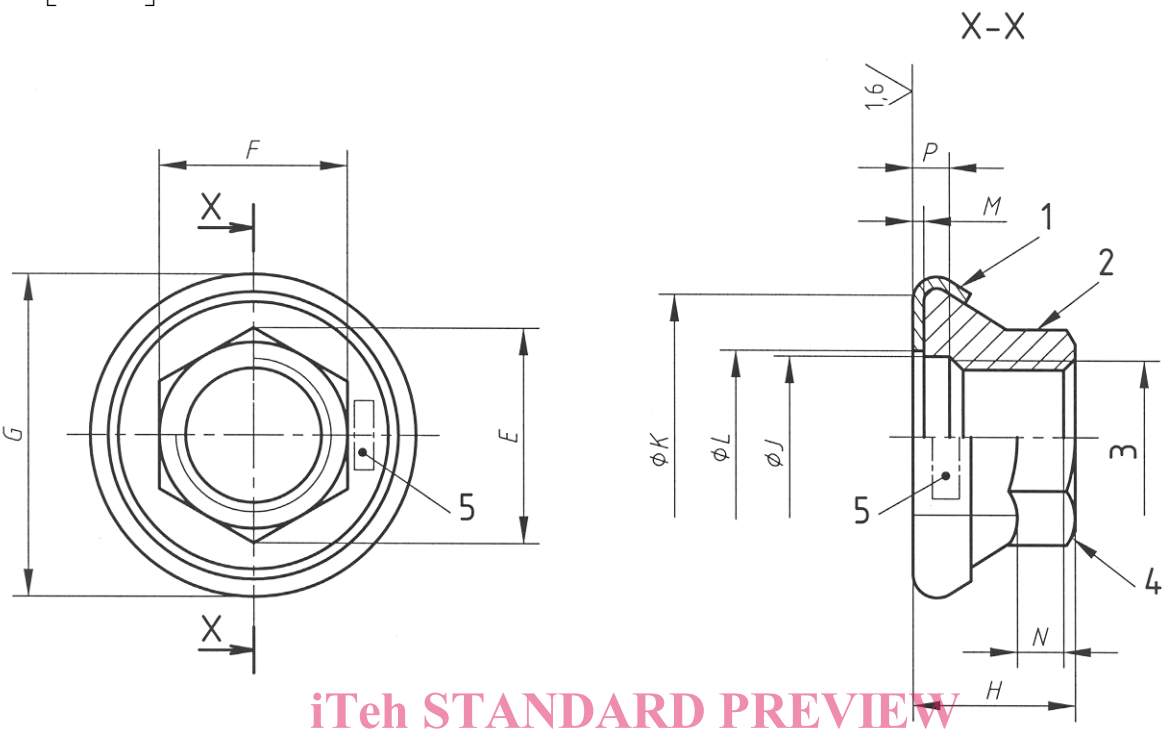
Washer : EN 2543 or EN 3329

3.3 Surface treatment

EN 2133, 5 µm minimum on threads and all areas which can be contacted by a 20 mm diameter ball. On all other areas, a continuous cadmium plating shall be present.

Nut only: EN 2491, thickness not specified.

6,3 [1,6] [a] Break sharp edges 0,1 mm to 0,4 mm



Key

1 Washer shall be free to rotate on the nut

2 Form out-of-round in this area to achieve the self-locking torque requirements. Tooling marks acceptable.

3 Thread

4 Chamfer, radius or broken edge

5 Marking

[a] These values, in micrometres, apply before cadmium plating and MoS_2 lubrication. The values do not apply to threads and sheared edges, the surface texture of which will be as achieved by usual manufacturing methods.

Details of form, not stated, are at the manufacturer's option.

Figure 1