Aerospace series - Nuts, bihexagonal, self-locking, in heat resisting nickel base alloy NI-PH2601 (Inconel 718), silver plated - Classification: 1 550 MPa (at ambient temperature) / 600 °C

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 4011:2005 sisaldab Euroopa standardi prEN 4011:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 4011:2005 consists of the English text of the European standard prEN 4011:2004. This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard specifies the characteristics of self-locking bihexagonal nuts in NI-PH2601, silver plated, for aerospace applications. Classification: 1 550 MPa 1) / 600 °C 2)	**Scope:** This standard specifies the characteristics of self-locking bihexagonal nuts in NI-PH2601, silver plated, for aerospace applications. Classification: 1 550 MPa 1) / 600 °C 2)

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English version

Aerospace series - Nuts, bihexagonal, self-locking, in heat resisting nickel base alloy NI-PH2601 (Inconel 718), silver plated - Classification: 1 550 MPa (at ambient temperature) / 600° C

Série aérospatiale - Écrous bihexagonaux, à freinage interne, en alliage résistant à chaud à base de nickel NI-PH2601 (Inconel 718), argentés - Classification : 1 550 MPa (à température ambiante) / 600° C

Luft- und Raumfahrt - Zwölfkantmuttern, selbstsichernd, aus hochwarmfester Nickelbasislegierung NI-PH2601 (Inconel 718), versilbert - Klasse: 1 550 MPa (bei Raumtemperatur) / 600° C

This European Standard was approved by CEN on 11 September 2003.

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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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Contents

Page

Foreword 3
1 Scope 4
2 Normative references 4
3 Required characteristics 4
4 Designation 6
5 Marking 6
6 Technical specification 6

Foreword

This document (EN 4011:2004) 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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

This document supersedes EN 4011:2003.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This standard specifies the characteristics of self-locking bihexagonal nuts in NI-PH2601, silver plated, for aerospace applications.

Classification: 1 550 MPa [1] / 600 °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 4095, *Aerospace – Bihexagonal drives – Wrenching configuration – Metric series*

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

EN 2424, *Aerospace series – Marking of aerospace products*

EN 2786, *Aerospace series – Electrolytic silver plating of fasteners* [3]

EN 2952, *Aerospace series – Heat resisting alloy NI-PH2601 – Solution treated and cold worked – Bar for forged fasteners – D ≤ 50 mm – 1 270 MPa ≤ R_m ≤ 1 550 MPa* [3]

EN 4047, *Aerospace series – Nuts, self-locking, MJ threads, in heat resisting nickel base alloy NI-PH2601 (Inconel 718), silver plated – Classification: 1 550 MPa (at ambient temperature) / 600 °C – Technical specification*

3 Required characteristics

3.1 Configuration – Dimensions – Tolerances – Masses

See Figure 1 and Table 1.

Dimensions and tolerances are in millimetres. They apply after silver plating.

3.2 Material

EN 2952

3.3 Surface treatment

EN 2786

Thickness:

- external surfaces: 5 µm to 15 µm;
- thread ≥ MJ6: 5 µm min., shall be measured at the pitch diameter;
- thread MJ5: shall show complete coverage, without thickness requirement.

1) Correspond to the minimum tensile stress which the nut is able to withstand at ambient temperature without breaking or cracking when tested with a bolt of a higher strength class.
2) Maximum test temperature of the parts
3) Published as AECMA Prestandard at the date of publication of this standard