



SLOVENSKI STANDARD
oSIST prEN 4013 rev:2023
01-april-2023

Nadomešča:
SIST EN 4013:2005

Aeronavtika - Zakovičene matice, samovarovalne, iz toplotnoodporne zlitine na nikljevi osnovi NI-PH2601 (Inconel 718), posrebrene - Klasifikacija: 1550 MPa (pri temperaturi okolice)/600 °C

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

(standards.iteh.ai)

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

Série aérospatiale - Écrous à sertir, 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

Ta slovenski standard je istoveten z: prEN 4013

ICS:

49.030.30 Matice Nuts

oSIST prEN 4013 rev:2023 en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 4013

January 2023

ICS 49.030.30

Will supersede EN 4013:2004

English Version

**Aerospace series - Shank nuts, 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 à sertir, 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 - Einnietmutter, selbstsichernd,
aus hochwarmfester Nickelbasislegierung NI-PH2601
(Inconel 718), versilbert - Klasse: 1 550 MPa (bei
Raumtemperatur) / 600 °C

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	5
4	Required characteristics	5
4.1	Configuration – Dimensions – Tolerances – Masses	5
4.2	Material	5
4.3	Surface treatment	5
5	Designation	7
6	Marking	7
7	Technical specification	7

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN 4013 rev:2023](https://standards.iteh.ai/catalog/standards/sist/8ffbd756-a6f1-4635-8bae-81b62d34981a/osist-pren-4013-rev-2023)

<https://standards.iteh.ai/catalog/standards/sist/8ffbd756-a6f1-4635-8bae-81b62d34981a/osist-pren-4013-rev-2023>

European foreword

This document (prEN 4013:2023) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

This document was reviewed by the Domain Technical Coordinator of ASD-STAN's Mechanical Domain.

After inquiries and votes carried out in accordance with the rules of ASD-STAN defined in ASD-STAN's General Process Manual, this document has received approval for Publication.

This document will supersede EN 4013:2004.

This document differs from EN 4013:2004 as follows:

- a) Clause 3, "Terms and definitions" added;
- b) Figure 1 updated;
- c) Table 1 updated;
- d) document editorially revised.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN 4013 rev:2023](https://standards.iteh.ai/catalog/standards/sist/8ffbd756-a6f1-4635-8bae-81b62d34981a/osist-pren-4013-rev-2023)

<https://standards.iteh.ai/catalog/standards/sist/8ffbd756-a6f1-4635-8bae-81b62d34981a/osist-pren-4013-rev-2023>

prEN 4013:2023 (E)**1 Scope**

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

Classification: 1 550 MPa¹ / 600 °C².

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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

EN 2786, *Aerospace series — Electrolytic silver plating of fasteners*

EN 2952,³ *Aerospace series — Heat resisting alloy NI-PH2601 — Solution treated and cold worked — Bar for forged fasteners — $D \leq 50$ mm — $1\,270$ MPa $\leq R_m \leq 1\,550$ MPa*

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*

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

STANDARD PREVIEW
(standards.iteh.ai)

oSIST prEN 4013 rev:2023

<https://standards.iteh.ai/catalog/standards/sist/8ffbd756-a6f1-4635-8bae-81b62d34981a/osist-pren-4013-rev-2023>

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 ASD-STAN Standard at the date of publication of this standard.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Required characteristics

4.1 Configuration - Dimensions - Tolerances - Masses

Shall be according to Figure 1 and Table 1.

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

4.2 Material

Materials shall be according to EN 2952.

4.3 Surface treatment

Surface treatment shall be according to EN 2786.

Thickness:

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