



# SLOVENSKI STANDARD

## SIST EN 4123:2005

01-junij-2005

BUXca Yý U  
SIST EN 4123:2004

---

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

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

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

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

**Ta slovenski standard je istoveten z: EN 4123:2004**

---

**ICS:**

49.030.30      Matice      Nuts

**SIST EN 4123:2005**      en

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 4123:2005

<https://standards.iteh.ai/catalog/standards/sist/842bea38-27a7-4c89-80a0-b5c11f66ddcd/sist-en-4123-2005>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 4123**

November 2004

ICS 49.030.30

Supersedes EN 4123:2003

English version

**Aerospace series - Shank nuts, self-locking, in heat resisting nickel base alloy NI-PH2601 (Inconel 718), silver plated on thread - 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 sur filetage - Classification : 1 550 MPa (à température ambiante) / 600° C

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

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

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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.

[SIST EN 4123:2005](https://standards.iteh.ai/catalog/standards/sist/4123-2005)

CEN members are the national standards bodies of 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.



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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

<b>Contents</b>	<b>Page</b>
Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Required characteristics .....	4
4 Designation .....	6
5 Marking .....	6
6 Technical specification .....	6

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 4123:2005](https://standards.iteh.ai/catalog/standards/sist/842bea38-27a7-4c89-80a0-b5c11f66ddcd/sist-en-4123-2005)

<https://standards.iteh.ai/catalog/standards/sist/842bea38-27a7-4c89-80a0-b5c11f66ddcd/sist-en-4123-2005>

## Foreword

This document (EN 4123:2004) 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 4123:2003.

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 the United Kingdom.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 4123:2005](#)

<https://standards.iteh.ai/catalog/standards/sist/842bea38-27a7-4c89-80a0-b5c11f66ddcd/sist-en-4123-2005>

## EN 4123:2004 (E)

**1 Scope**

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

Classification: 1 550 MPa <sup>1)</sup> / 600 °C <sup>2)</sup>

**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*

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

EN 2786, *Aerospace series – Electrolytic silver plating of fasteners* <sup>3)</sup>

EN 2952, *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* <sup>3)</sup>

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*

iteh STANDARD PREVIEW  
(standards.iteh.ai)

**3 Required characteristics****3.1 Configuration – Dimensions – Tolerances – Masses**

<https://standards.iteh.ai/catalog/standards/sist/842bea38-27a7-4c89-80a0-b5c11f66ddcd/sist-en-4123-2005>

See Figure 1 and Table 1.

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

**3.2 Material**

EN 2952

**3.3 Surface treatment**

EN 2786 on thread only

Thickness:

- thread  $\geq$  MJ6: 5  $\mu$ m min. on thread flanks;
- thread MJ5: shall show complete coverage, without thickness requirement.

Coating may extend to counterbore and chamfers at manufacturer's option, 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



EN 4123:2004 (E)

Table 1

Code	Thread <sup>a</sup> Designation	C	E	H	J	L		P	S	T	Z	Mass kg/1 000 parts ≈
		± 0,1	± 0,25	h14	$\begin{matrix} +0,1 \\ 0 \end{matrix}$	nom.	Tol.	$\begin{matrix} 0 \\ -0,1 \end{matrix}$	± 0,1	± 0,25	max.	
050	MJ5×0,8-4H6H	7	13	7	5,2	1,8	± 0,10	6,5	9,5	2,4	8,5	2,78
060	MJ6×1-4H5H	8	14	8	6,2			7,5	10,5		9,5	3,45
070	MJ7×1-4H5H	9	16	9	7,2	2,8		8,5	11,5	3,4	10,5	4,28
080	MJ8×1-4H5H	10	17	10	8,2	3,2	± 0,15	9,5	12,5	3,9	11,5	5,56

<sup>a</sup> In accordance with ISO 5855-2. In the self-locking zone, the tolerances apply before forming out-of-round.

## 4 Designation

EXAMPLE

Description block

Identity block

NUT

EN4123-050

Number of this standard

Thread code (see Table 1)

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

NOTE If necessary, the code I9005 shall be placed between the description block and the identity block.

<https://standards.iteh.ai/catalog/standards/sist/842bea38-27a7-4c89-80a0-b5c11f66ddcd/sist-en-4123-2005>

## 5 Marking

EN 2424, style A, as indicated on Figure 1.

## 6 Technical specification

EN 4047