

**SLOVENSKI STANDARD  
SIST EN 2908:2001****01-januar-2001**

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**Aerospace series - Nuts, bihexagonal, self-locking, deep counterbored, in heat resisting steel FE-PA92HT (A286) - Classification: 1 100 MPa (at ambient temperature) / 650 °C**

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Luft- und Raumfahrt - Zwölfkantmuttern, selbstsichernd, mit zylindrischer Aussenkung, aus hochwarmfestem Stahl FE-PA92HT (A286) - Klasse: 1 100 MPa (bei Raumtemperatur) / 650 °C

Série aérospatiale - Ecrous bihexagonaux, à freinage interne, chambrés, en acier résistant à chaud FE-PA92HT (A286) Classification: 1 100 MPa (à température ambiante) / 650 °C

**Ta slovenski standard je istoveten z: EN 2908:1994**

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**ICS:**

49.030.30      Matrice      Nuts

**SIST EN 2908:2001**      **en**

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EUROPEAN STANDARD

**EN 2908**

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 1994

UDC 621.882.3-034.018.44:629.7

**Descriptors:** Aircraft industry, fastener, double hexagonal nut, self locking nut, heat resistant steel, classification, characteristic, dimension, screw thread, code, designation, marking

English version

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deep counterbored, in heat resisting steel  
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selbstsichernd, mit zylindrischer Aussenkung,  
aus hochwarmfestem Stahl FE-PA92HT (A286) -  
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This European Standard was approved by CEN on 1994-08-17. 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.

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CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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## Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

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

This standard was submitted for Formal Vote, and the result was positive.

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 February 1995, and conflicting national standards shall be withdrawn at the latest by February 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.



## 1 Scope

This standard specifies the characteristics of self-locking bihexagonal nuts with deep counterbore in FE-PA92HT for aerospace applications.

Classification : 1 100 MPa<sup>1)</sup> / 650 °C<sup>2)</sup>

## 2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 4095 Fasteners for aerospace construction - Bi-hexagonal wrenching configuration

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

EN 2399 Heat resisting steel FE-PA92-HT -  $R_m \geq 900$  MPa - Bars for forged bolts -  $D \leq 25$  mm - Aerospace series<sup>3)</sup>

EN 2424 Aerospace series - Marking of aerospace products<sup>3)</sup>

EN 3004 Aerospace series - Nuts, self-locking, in heat resisting steel FE-PA92HT (A286) - Classification : 1 100 MPa / 650 °C - Technical specification<sup>4)</sup>

EN 3639 Aerospace series - Heat resisting alloy FE-PA2601 - Softened and cold worked - Wire for forged fasteners -  $D \leq 15$  mm -  $900$  MPa  $\leq R_m \leq 1 100$  MPa<sup>4)</sup>

## 3 Required characteristics

### 3.1 Configuration - Dimensions - Tolerances - Masses

See figure 1 and table 1. Dimensions and tolerances are in millimetres.

### 3.2 Materials

EN 2399 or EN 3639

1) The strength class of the bolt concerned which can withstand the load at ambient temperature when tested at 100 % load without cracking or breaking of the nut.

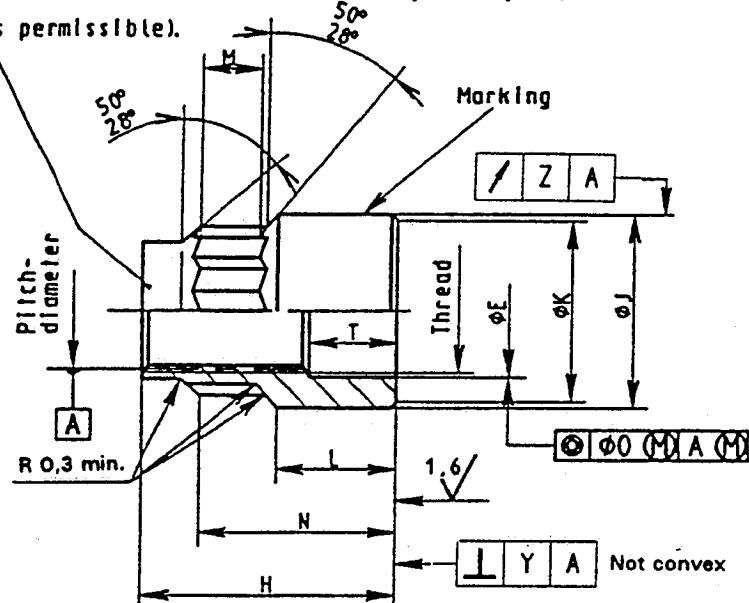
2) Maximum test temperature of the parts

3) Published as AECMA Standard at the date of publication of this standard

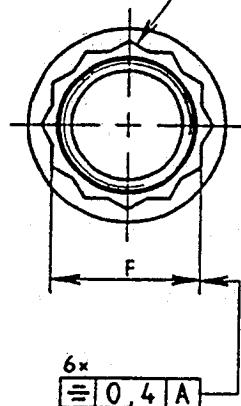
4) Published as AECMA Prestandard at the date of publication of this standard

Form out-of-round in this area to achieve the self-locking requirement (tooling marks permissible).

6.3/ (1.6/ ) Thread surface will be as achieved by normal methods of manufacture.



Bihexagonal configuration in accordance with ISO 4095 over length M



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Remove sharp edges 0,1 to 0,4

Details of form not stated are left to the manufacturer's discretion.

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<https://standards.iteh.ai/catalog/standards/sist/7172f8b3-05fa-4b79-89f1-58d935b> Figure 1en-2908-2001

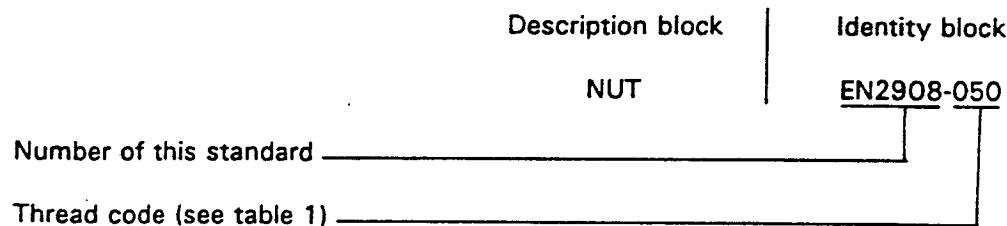
Table 1

Thread <sup>1)</sup>		E		F	H	J	K	L	M	N	T	Y	Z	Mass kg/1 000 parts
Code	Designation	max.	min.		max.	max.	min.	min.	min.	max.	± 0,2			≈
050	MJ5x0,8-4H6H	5,8	5,2	7	11,5	9,	8,3	5,7	2	9,4	4,5	0,1	0,2	2,87
060	MJ6x1-4H5H	7,1	6,3	8	12,9	10,	9,8	5,95	2,3	10,3	4,75			3,98
070	MJ7x1-4H5H	8,1	7,3	9	14,1	12,	11,3	6,2	2,6	11,1	5			4,95
080	MJ8x1-4H5H	9,1	8,3	10	15,7	13,	12,8	6,45	2,8	12,2	5,25			6
100	MJ10x1,25-4H5H	11,1	10,3	12	18,5	16,	15,8	6,7	3,1	14,3	5,5	0,13	0,3	8,84

1) In accordance with ISO 5855-2. In the self-locking zone, the tolerances apply before forming out-of-round.

#### 4 Designation

EXAMPLE :



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

#### 5 Marking

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

#### 6 Technical specification

EN 3004

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