SLOVENSKI STANDARD
SIST EN 3377:2001

01-januar-2001

Aerospace series - Nuts, hexagonal, self-locking, in heat resisting steel FE-PA92HT (A 286) - Classification: 1 100 MPa (at ambient temperature)/425°C

Aerospace series - Nuts, hexagonal, self-locking, in heat resisting steel FE-PA92HT (A 286) - Classification: 1 100 MPa (at ambient temperature)/425°C

Luft- und Raumfahrt - Sechskantmuttern, selbstsichernd, aus hochwarmfestem Stahl FE-PA92HT (A286) - Klasse: 1 100 MPa (bei Raumtemperatur)/425°C

Série aérospatiale - Ecrous hexagonaux, a freinage interne, en acier résistant a chaud FE-PA92HT (A286) - Classification: 1 100 MPa (a température ambiante)/425°C

Ta slovenski standard je istoveten z: **EN 3377:1996**

ICS:

49.030.30 Matice Nuts

SIST EN 3377:2001 **en**

EUROPEAN STANDARD **EN 3377**

NORME EUROPÉENNE

EUROPÄISCHE NORM March 1996

ICS 49.040.20

Descriptors: aircraft industry, hexagonal nut, self-locking nut, heat resistant steel, classification, surface treatement, dimension, designation

English version

Aerospace series - Nuts, hexagonal, self-locking, in heat resisting steel FE-PA92HT (A286) - Classification : 1 100 MPa (at ambient temperature) / 425 °C

Série aérospatiale - Ecrous hexagonaux, à freinage interne, en acier résistant à chaud FE-PA92HT (A286) - Classification : 1 100 MPa (à température ambiante) / 425 °C

Luft- und Raumfahrt - Sechskantmuttern, selbstsichernd, aus hochwarmfestem Stahl FE-PA92HT (A286) - Klasse : 1 100 MPa (bei Raumtemperatur) / 425 °C

This European Standard was approved by CEN on 1995-08-31. 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.

The European Standards exist 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.

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

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 members 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 September 1996, and conflicting national standards shall be withdrawn at the latest by September 1996.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of 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 and United Kingdom

1 Scope

This standard specifies the characteristics of self-locking hexagonal nuts in FE-PA92HT for aerospace applications.

Classification : 1 100 MPa [1] / 425 °C [2]

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 5855-2	Aerospace - MJ threads - Part 2 : Limit dimensions for bolts and nuts
ISO 7995	Aerospace - Nuts, hexagonal, self-locking, with MJ threads, coated or uncoated, classification 1 100 MPa / 235 °C, 1 100 MPa / 315 °C or 1 100 MPa / 425 °C - Dimensions
EN 2399	Heat resisting steel FE-PA92-HT - $R_m \geq 900$ MPa - Bars for forged bolts - $D \leq 25$ mm - Aerospace series [3]
EN 2424	Aerospace series - Marking of aerospace products
EN 3152	Aerospace series - Propulsion standard parts - Nuts, self-locking, in heat resisting steel FE-PA92HT (A286) - Classification : 1 100 MPa / 425 °C - Technical specification [4]
EN 3638	Aerospace series - Heat resisting steel FE-PA92HT - Solution treated - Sheet and strip - $a \leq 3$ mm [5]
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 [4]

3 Required characteristics

3.1 Configuration - Dimensions - Tolerances - Masses

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

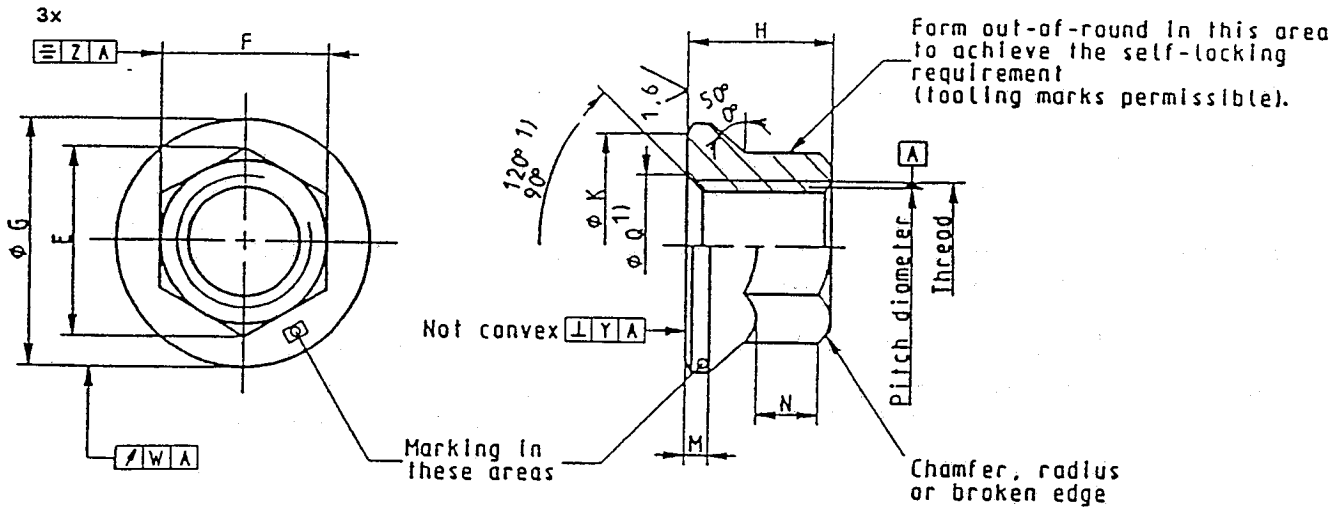
3.2 Materials

EN 2399, EN 3638 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
5) In preparation at the date of publication of this standard

6,3 [1,6] Thread surface will be as achieved by normal methods of manufacture.



1) All forms of entry (radius or chamfer) are permissible within these limiting dimensions.

Remove sharp edges 0,1 to 0,4

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

Figure 1

Table 1

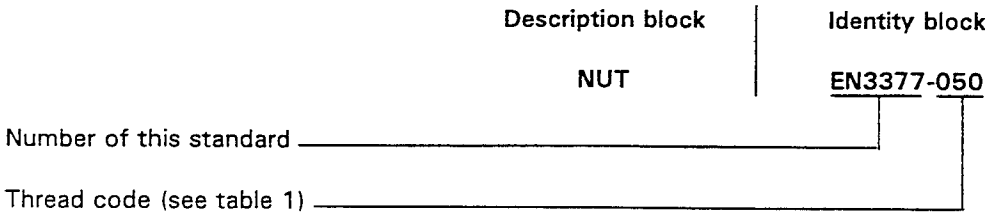
Thread 1)		E 2)	F 2)		G	H	K	M	N 3)	Q		W	Y	Z 4)	Mass kg/1 00 parts ≈
Code	Designation	min.	nom.	Tol.	max.	max.	min.	min.	min.	max.	min.				
030	MJ3x0,5-4H6H	4,2	4	h12	6	3	5,3	0,4	1,2	3,8	3,2	0,2	0,1	0,2	0,28
040	MJ4x0,7-4H6H	5,3	5		7,4	4	6,7	0,5	1,5	4,8	4,2				0,50
050	MJ5x0,8-4H6H	6,5	6		9,1	5	8,3	0,6	2	5,8	5,2				0,80
060	MJ6x1-4H5H	7,6	7		10,6	5,4	9,8	0,7	2,3	7,1	6,3			0,4	1,15
070	MJ7x1-4H5H	8,7	8		12,1	6,3	11,3	0,8	2,7	8,1	7,3				1,70
080	MJ8x1-4H5H	10,9	10	h13	13,6	7,2	12,8	0,9	3,2	9,1	8,3				3,15
100	MJ10x1,25-4H5H	13,2	12		16,8	9	15,8	1,1	3,8	11,1	10,3	0,3	0,13		4,75
120	MJ12x1,25-4H5H	15,5	14		19,9	10,8	18,8	1,4	4,5	13,1	12,3				10

1) In accordance with ISO 5855-2. In the self-locking zone, the tolerances apply before forming out-of-round.
2) Applicable before forming out-of-round, but finished nuts shall fit a standard socket wrench.
3) Wrench pad engagement
4) Values apply before forming out-of-round.

NOTE : The dimensions are in accordance with ISO 7995.

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 see table 2 and as indicated on figure 1.

Table 2

Thread code	Style
030 and 040	N
050 to 120	C

6 Technical specification

EN 3152