SLOVENSKI STANDARD
SIST EN 2938:2001

01-januar-2001

Aerospace series - Screws, hexagon head, threaded to head, in heat resisting steel FE-PA92HT (A286), silver plated - Classification: 900 MPa (at ambient temperature) / 650 °C

Aerospace series - Screws, hexagon head, threaded to head, in heat resisting steel FE-PA92HT (A286), silver plated - Classification: 900 MPa (at ambient temperature) / 650 °C

Luft- und Raumfahrt - Sechskantschrauben, Gewinde bis Kopf, aus hochwarmfestem Stahl FE-PA92HT (A286), versilbert - Klasse: 900 MPa (bei Raumtemperatur) / 650 °C

Série aérospatiale - Vis a tete hexagonale, filetées sous tete, en acier résistant a chaud FE-PA92HT (A286), argentées - Classification: 900 MPa (a température ambiante) / 650 °C

Ta slovenski standard je istoveten z: **EN 2938:1995**

ICS:

49.030.20	Sorniki, vijaki, stebelni vijaki	Bolts, screws, studs

SIST EN 2938:2001 **en**

EUROPEAN STANDARD **EN 2938**

NORME EUROPÉENNE

EUROPÄISCHE NORM October 1995

ICS 49.040.20

Descriptors: aircraft industry, fastener, screw, hexagonal head screw, steel, heat resistant steel, silver coating, classification dimension, surface treatment, screw thread, designation

English version

Aerospace series - Screws, hexagon head, threaded to head, in heat resisting steel FE-PA92HT (A286), silver plated - Classification : 900 MPa (at ambient temperature) / 650 °C

Série aérospatiale - Vis à tête hexagonale, filetées sous tête, en acier résistant à chaud FE-PA92HT (A286), argentées - Classification : 900 MPa (à température ambiante) / 650 °C

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This European Standard was approved by CEN on 1995-04-13. 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 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 April 1996, and conflicting national standards shall be withdrawn at the latest by April 1996.

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 hexagon headed screws, threaded to head in FE-PA92HT, silver plated, for aerospace applications.

Classification : 900 MPa [1] / 650 °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 3353 Aerospace - Rolled threads for bolts - Lead and runout requirements

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

EN 2398 Heat resisting steel FE-PA92-HT - $R_m \geq 900$ MPa - Bars for machined bolts - $D \leq 25$ mm - Aerospace series [3]

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 2786 Aerospace series - Electrolytic silver plating of fasteners [4]

EN 3043 Aerospace series - Fasteners, externally threaded, in heat resisting steel FE-PA92HT (A286) - Classification : 900 MPa / 650 °C - Manufacturing method optional - Technical specification [4]

3 Required characteristics

3.1 Configuration - Dimensions - Tolerances - Masses

See figure 1 and tables 1 and 2. Dimensions and tolerances are in millimetres. They apply after silver plating.

3.2 Materials

EN 2398 or EN 2399

3.3 Surface treatment

EN 2786

Thickness :

- thread : 3 μm to 6 μm shall be measured at the pitch diameter ;
- other areas may show complete coverage, without thickness requirement.

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1) Minimum tensile strength of the material at ambient temperature
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

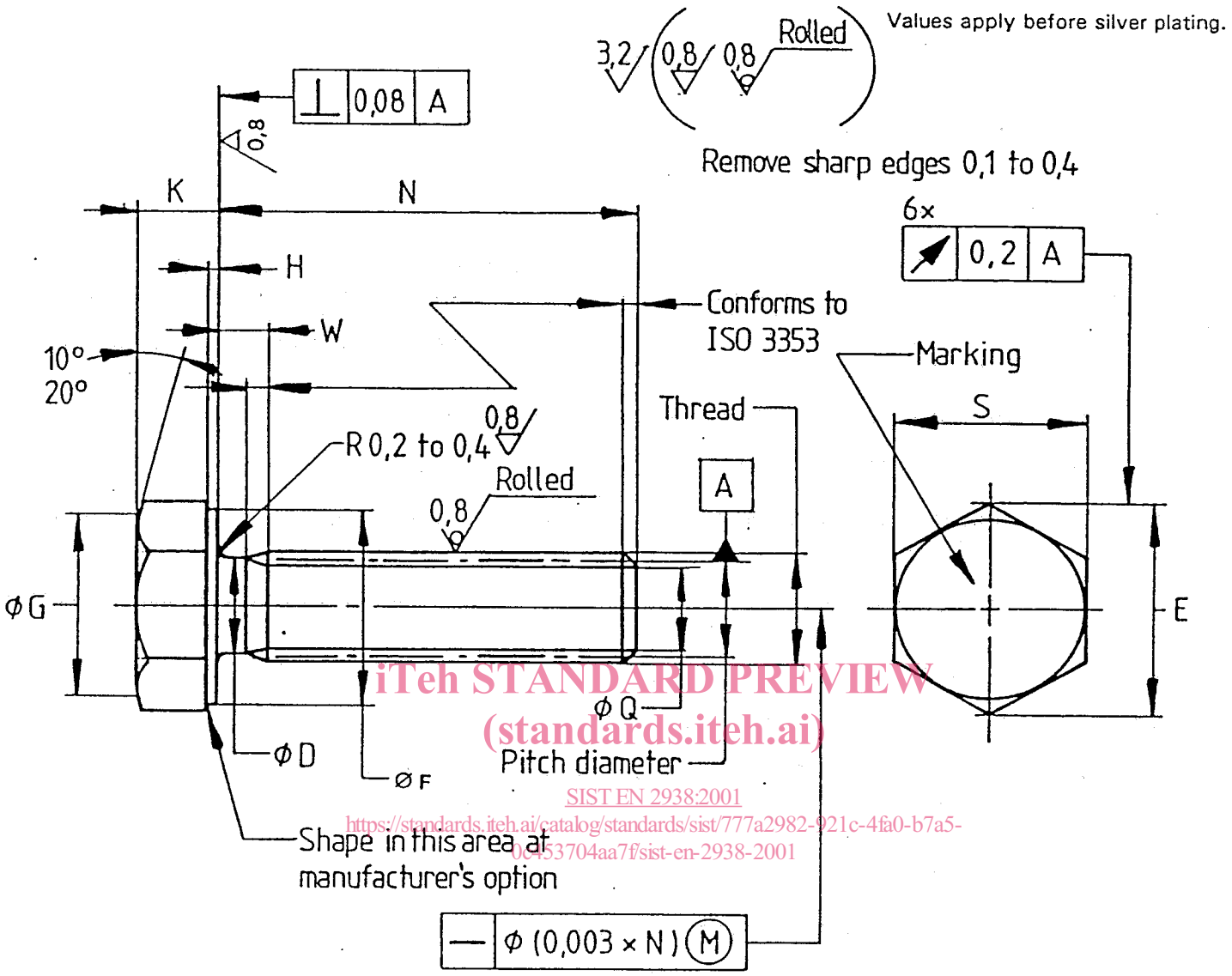


Figure 1

Table 1

Thread [1]		*D*	*E*	*F*	*G*	*H*		*K*	*Q*	*S*	*W*	
Code	Designation	± 0,13	min.	min.	min.	max.	min.	0 - 0,3	0 - 0,5	h12	max.	min.
030	MJ3x0,5-4h6h	2,68	6,5	5,4	5,5	0,4	0,2	2	2,3	6	1,4	1,15
040	MJ4x0,7-4h6h	3,55	7,6	6,4	6,4	0,5		2,5	3,1	7	1,8	1,45
1) In accordance with ISO 5855-2												

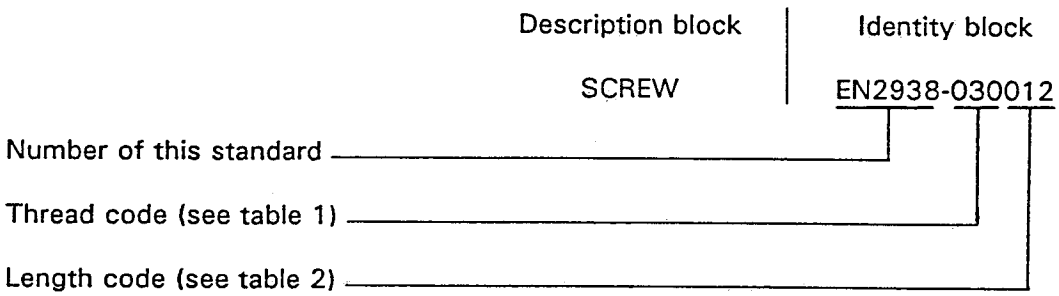
Table 2

Length code	*N* ± 0,3	Thread code	
		030	040
		Mass [1]	Mass [1]
004	4	0,67	
006	6	0,76	1,31
008	8	0,85	1,46
010	10	0,94	1,62
012	12	1,02	1,77
014	14	1,11	1,93
016	16	1,20	2,09
018	18	1,29	2,24
020	20	1,38	2,40
022	22	1,47	2,55
024	24	1,56	2,71
026	26	1,65	2,87
028	28	1,73	3,02
030	30	1,82	3,18
032	32	1,91	3,33
034	34	2,00	3,49
036	36	2,09	3,64
038	38	2,18	3,80
040	40	2,27	3,96
042	42	2,36	4,11
044	44		4,27
046	46		4,42
048	48		4,58
050	50		4,74
052	52		4,89
054	54		5,05
056	56		5,20

1) Mass ≈ quoted in kg/1 000 parts

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 3043