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**Aeronavtika - Vijak, 100° ugrezna glava, križna zareza, z navojem do glave, iz toplotno odpornega jekla FE-PA92HT (A286) - Klasifikacija: 900 MPa (pri okoljski temperaturi)/650 °C**

Aerospace series - Screw, 100° countersunk head, offset cruciform recess, threaded to head, in heat resisting steel FE-PA92HT (A286) - Classification: 900 MPa (at ambient temperature) / 650 °C

Luft- und Raumfahrt - 100° Senkschraube mit Flügelkreuzschlitz, Gewinde bis Kopf aus hochwärmfestem Stahl FE-PA92HT (A286) - Klasse: 900 MPa (bei Raumtemperatur)/650 °C

Série aérospatiale - Vis à tête fraisée 100°, empreinte cruciforme déportée, filetées sous tête, en acier résistant à chaud FE-PA92HT (A286) - Classification: 900 MPa (à température ambiante)/650 °C

**Ta slovenski standard je istoveten z: prEN 2939**

**ICS:**

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

**oSIST prEN 2939:2023**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 2939**

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ICS 49.030.20

Will supersede EN 2939:1994

English Version

**Aerospace series - Screw, 100° countersunk head, offset  
cruciform recess, threaded to head, in heat resisting steel  
FE-PA92HT (A286) - Classification: 900 MPa (at ambient  
temperature) / 650 °C**

Série aérospatiale - Vis à tête fraisée 100°, empreinte  
cruciforme déportée, filetées sous tête, en acier  
résistant à chaud FE-PA92HT (A286) - Classification:  
900 MPa (à température ambiante)/650 °C

Luft- und Raumfahrt - 100° Senkschraube mit  
Flügelkreuzschlitz, Gewinde bis Kopf aus  
hochwärmfestem Stahl FE-PA92HT (A286) - Klasse:  
900 MPa (bei Raumtemperatur)/650 °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.

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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**

<b>Contents</b>		Page
<b>European foreword</b> .....		<b>3</b>
<b>1</b>	<b>Scope</b> .....	<b>4</b>
<b>2</b>	<b>Normative references</b> .....	<b>4</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>4</b>
<b>4</b>	<b>Required characteristics</b> .....	<b>4</b>
<b>4.1</b>	<b>Configuration — Dimensions — Tolerances — Masses</b> .....	<b>4</b>
<b>4.2</b>	<b>Materials</b> .....	<b>4</b>
<b>5</b>	<b>Designation</b> .....	<b>7</b>
<b>6</b>	<b>Marking</b> .....	<b>7</b>
<b>7</b>	<b>Technical specification</b> .....	<b>7</b>

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## European foreword

This document (prEN 2939:2023) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 2939:1994.

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**prEN 2939:2023 (E)****1 Scope**

This document specifies the characteristics of screws with 100° countersunk head, offset cruciform recess, threaded to head, in FE-PA92HT, for aerospace applications.

Classification: 900 MPa<sup>1</sup>/650 °C<sup>2</sup>.

**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 2398, *Aerospace series - Heat resisting steel FE-PA2601 (X6NiCrTiMoV26-15) - Rm ≥ 900 MPa - Bars for machined bolts - D ≤ 25 mm*<sup>3</sup>

EN 2399, *Aerospace series - Heat resisting steel FE-PA2601 (X4NiCrTiMoV26-15) - Rm ≥ 900 MPa - Bars for forged bolts - D ≤ 25 mm*<sup>3</sup>

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

EN 3043, *Aerospace series - Fasteners, externally threaded, in heat resisting steel FE PA92HT (A286) - Classification: 900 MPa/650 °C, manufacturing method optional - Technical specification*<sup>3</sup>

ISO 3353-1, *Aerospace — Lead and runout threads — Part 1: Rolled external threads*

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

ISO 14275, *Aerospace — Drives, internal, offset cruciform, ribbed — Metric series*

ISO 14276, *Aerospace — Drives, internal, offset cruciform — Metric series*

**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**

According to Figure 1 and Table 1 and Table 2. Dimensions and tolerances are expressed in millimetres.

**4.2 Materials**

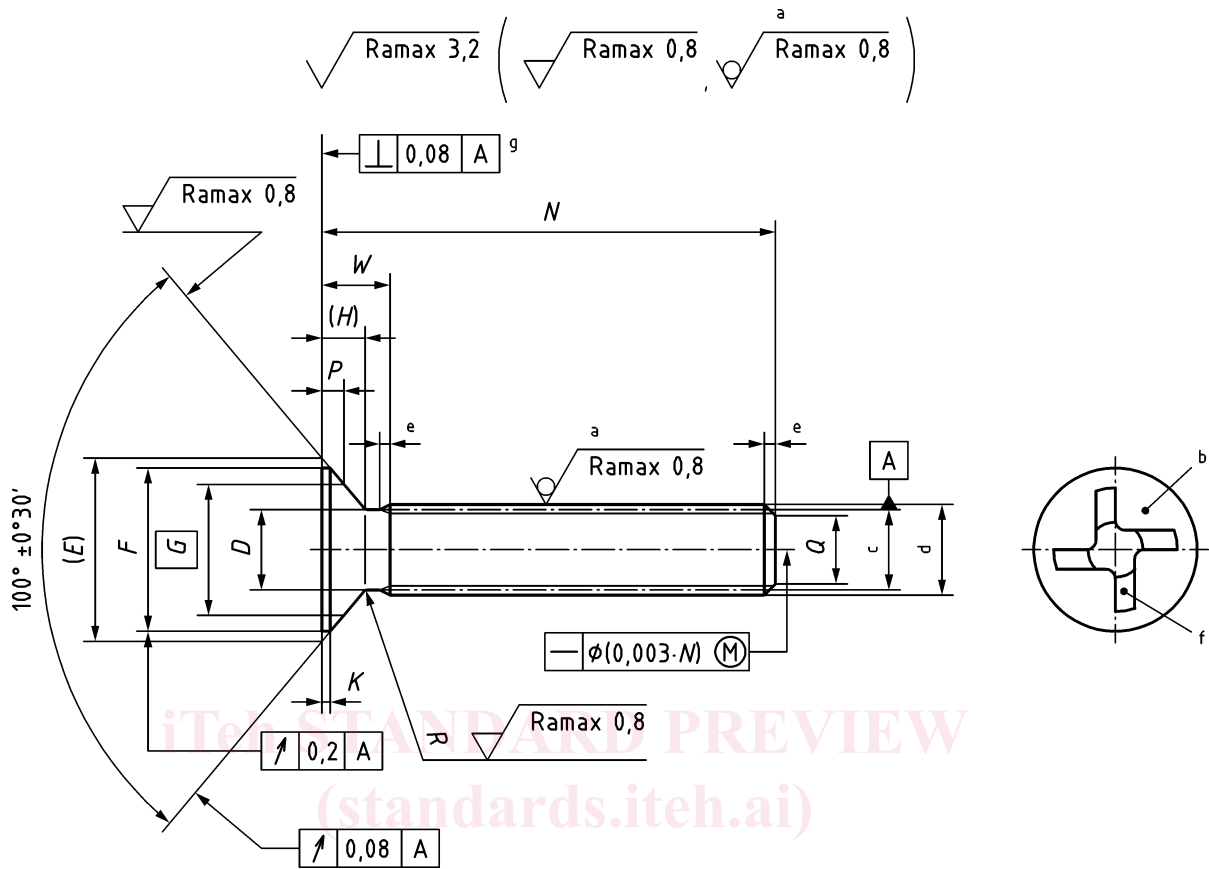
Materials shall be according to EN 2398 and EN 2399.

<sup>1</sup> Minimum tensile strength of the material at ambient temperature.

<sup>2</sup> Maximum test temperature of the parts.

<sup>3</sup> Published as ASD-STAN Prestandard at the date of publication of this standard by AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN) ([www.asd-stan.org](http://www.asd-stan.org)).

Remove sharp edges 0,1 to 0,4.



**Key**

- a Thread rolling
- b Marking
- c Pitch diameter
- d Thread
- e Conforms to ISO 3353-1
- f Drive, see Table 3
- g Not concave

**Figure 1 — 100° countersunk head screw**

**Table 1 — Dimensions**

Code	Thread <sup>a</sup> Designation	D ±0,13	E <sup>b</sup>	F min.	G	H <sup>b</sup>	K min.	P 0 -0,08	Q		R		W		Recess number ISO 14275
									nom.	Tol.	min.	max.	min.	max.	
030	MJ3 × 0,5-4h6h	2,68	6	5,4	4,5	1,4	0,06	0,63	2,3	0	0,2	0,4	2,15	2,4	R3
040	MJ4 × 0,7-4h6h	3,55	8	7,2	5,78	1,9	0,08	0,93	3	-0,5			2,92	3,27	R4
050	MJ5 × 0,8-4h6h	4,48	10	9	7,71	2,4	0,1	0,96	3,4	±0,5	0,3	0,5	3,58	3,98	R5

<sup>a</sup> In accordance with ISO 5855-2.

<sup>b</sup> Corresponds to maximum condition.