

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|  |   |
|--|---|
| <p>See Eesti standard EVS-EN 2939:2024 sisaldab Euroopa standardi EN 2939:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.03.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p> | <p>This Estonian standard EVS-EN 2939:2024 consists of the English text of the European standard EN 2939:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 13.03.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p> |
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ICS 49.030.20

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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, fileté jusqu'à proximité de la tête, en acier résistant à chaud FE-PA92HT (A286) - Classification : 900 MPa (à température ambiante)/650 °C

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

This European Standard was approved by CEN on 29 January 2024.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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## European foreword

This document (EN 2939:2024) has been prepared by 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 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 2024, and conflicting national standards shall be withdrawn at the latest by September 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 2939:1994.

EN 2939:2024 includes the following significant technical changes with respect to EN 2939:1994:

- normative references updated;
- Clause 3 “Terms and definitions” added;
- Clause 5 “Designation” introduction of drive code;
- document editorially revised.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## 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) —  $R_m \geq 900$  MPa — Bars for machined bolts —  $D \leq 25$  mm*

EN 2399, *Aerospace series — Heat resisting steel FE-PA2601 (X4NiCrTiMoV26-15) —  $R_m \geq 900$  MPa — Bars for forged bolts —  $D \leq 25$  mm*

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

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

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

Configuration, dimensions, tolerances and masses shall be according to Figure 1 and Table 1 and Table 2. Dimensions and tolerances are expressed in millimetres.

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

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