

SLOVENSKI STANDARD

SIST EN 4634:2009

01-oktober-2009

Aeronautika - Vijaki, 100° ugrezna glava, šestzoba vdolbina, kratek navoj, iz topotnoodpornega jekla FE-PA2601 (A286), pasivirani - Klasifikacija: 900 MPa (pri temperaturi okolice)/650 °C

Aerospace series - Screws, 100° countersunk head, six lobe recess, short thread, in heat resisting steel FE-PA2601 (A286), passivated - Classification: 900 MPa (at ambient temperature)/650 °C

iTeh STANDARD PREVIEW

Luft- und Raumfahrt – 100° Senkschrauben, kurzes Gewinde, Sechs-Bogenzahn, aus hochwarmfester Stahl FE-PA2601 (A286), passiviert Klasse: 900 MPa (bei Raumtemperatur)/650° C

[SIST EN 4634:2009](#)

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Série aérospatiale - Vis, 100° à tête fraisée, à filetage court, à empreinte six lobes, en acier résistant à chaud FE-PA2601 (A286), passivées - Classification: 900 Mpa (à température ambiante)/650°C

Ta slovenski standard je istoveten z: EN 4634:2009

ICS:

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

SIST EN 4634:2009

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 4634

July 2009

ICS 49.030.20

English Version

Aerospace series - Screws, 100° countersunk head, six lobe recess, short thread, in heat resisting steel FE-PA2601 (A286), passivated - Classification: 900 MPa (at ambient temperature) / 650 °C

Série aéronautique - Vis, 100° à tête fraisée, à filetage court, à empreinte six lobes, en acier résistant à chaud FE-PA2601 (A286), passivées - Classification : 900 Mpa (à température ambiante) / 650 °C

Luft- und Raumfahrt – 100° Senkschrauben, kurzes Gewinde, Sechs-Bogenzahn, aus hochwarmfester Stahl FE-PA2601 (A286), passiviert - Klasse: 900 MPa (bei Raumtemperatur) / 650 °C

This European Standard was approved by CEN on 12 March 2009.

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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 Management Centre has the same status as the official versions.

SIST EN 4634:2009

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 4634:2009) 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 Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, 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 January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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1 Scope

This standard specifies the characteristics of screws with 100° countersunk head, with six lobes recess, short thread, in heat resisting steel FE-PA2601, passivated, for aerospace applications.

2 Normative references

The following referenced documents are indispensable for the application 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.

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 7913, *Aerospace — Bolts and screws, metric — Tolerances of form and position*.

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

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

EN 2516, *Aerospace series — Passivation of corrosion resisting steels and decontamination of nickel base alloys*.

EN 2576, *Aerospace series — Bolts in heat resisting steel FE-PA92HT (A286) — Classification: 900 MPa/650 °C — Technical specification*.¹⁾ [SIST EN 4634:2009](#)

EN 3639, *Aerospace series — Heat resisting alloy FE-PA2601 — Softened and cold worked — Wire for forged fasteners — D ≤ 15 mm - 900 MPa ≤ R_m ≤ 1100 MPa*.²⁾ https://standards.iteh.ai/catalog/standards/sist/a0b018f7_9060-4dcc_8aeh-81fbef342d33/sist-en-4634-2009

EN 3911, *Aerospace series — Six lobe recess — Geometrical definition*.¹⁾

TR 3775, *Aerospace series — Bolts and pins — Materials*.²⁾

3 Required characteristics

3.1 Configuration – Dimensions – Tolerances – Masses

See Figure 1 and Table 1.

Dimensions and tolerances are in millimetres and apply after surface treatment.

3.2 Materials

EN 2399, EN 3639, TR 3775

1) Published as ASD Prestandard at the date of publication of this standard.

2) Published as ASD Technical Report at the date of publication of this standard.

3.3 Surface treatment

EN 2516

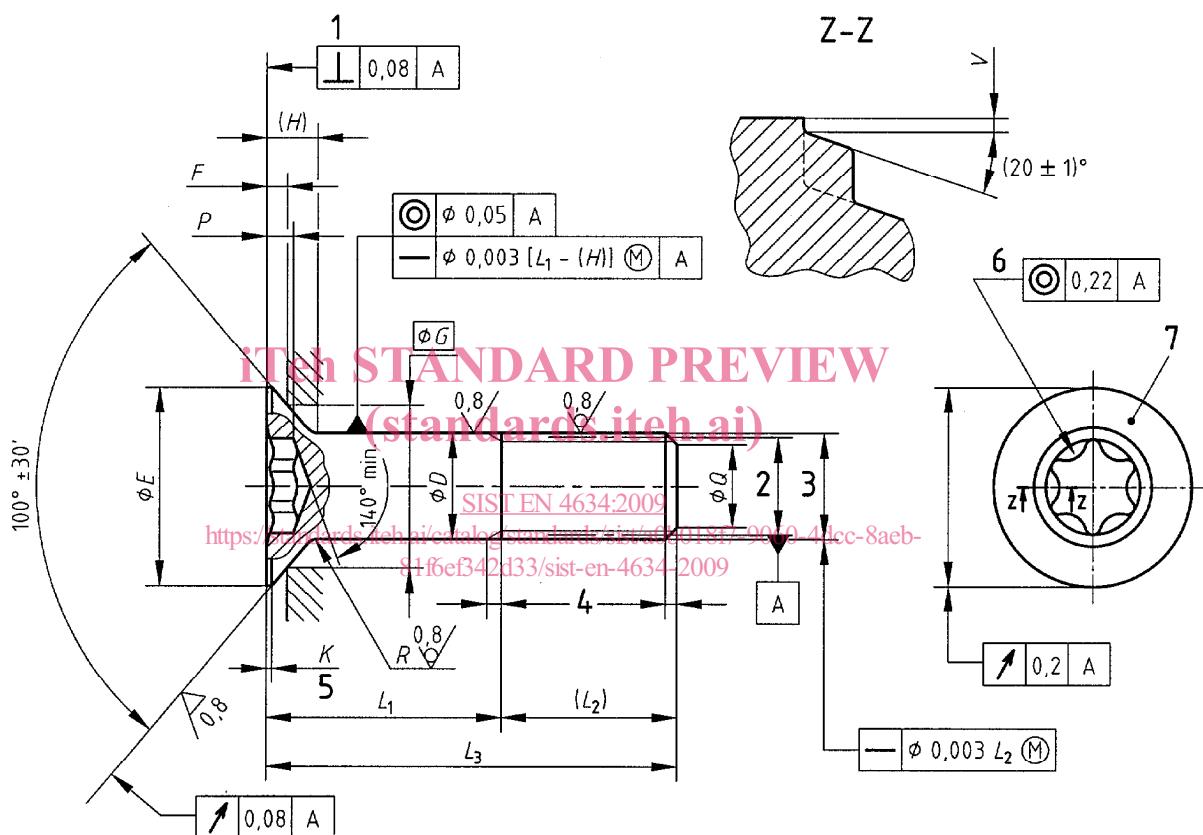
3.4 Tolerances of form and position

ISO 7913

$3,2 \checkmark$ $[0,8 \checkmark]$

Values in micrometres apply prior to surface treatment.

Remove sharp edges 0,1 to 0,4.



Key

- 1 Not concave
- 2 Pitch diameter
- 3 Thread
- 4 Conforms to ISO 3353-1
- 5 The rounded angle accepted
- 6 Six lobe recess conforms to EN 3911
- 7 Marking

Figure 1

Table 1

| Code | Thread Designation | <i>D</i> h12 | $\emptyset E$ min. | <i>F</i> $0_{-0,08}$ | <i>G</i> Ref. | <i>H</i> Ref. | <i>K</i> min. | $L_1 \pm 0,2$ Length code | <i>L</i> min. |
|-------------|-------------------------------------|-----------------|-----------------------|-------------------------|------------------|------------------|------------------|-------------------------------------|------------------|
| 030 | MJ3×0,5-4h6h | 3 | 5,6 | 0,63 | 4,50 | 1,3 | 0,06 | 003 to 030 | 3 6 |
| 040 | MJ4×0,7-4h6h | 4 | 7,5 | 0,93 | 5,78 | 1,7 | 0,08 | 003 to 040 | 3 7,5 |
| 050 | MJ5×0,8-4h6h | 5 | 9,5 | 0,96 | 7,71 | 2,1 | 0,1 | 004 to 050 | 4 9 |
| 060 | MJ6×1-4h6h | 6 | 11,5 | 1,26 | 9,00 | 2,6 | 0,1 | 005 to 060 | 5 10 |
| 080 | MJ8×1-4h6h | 8 | 15,4 | 1,60 | 12,21 | 3,4 | 0,1 | 006 to 080 | 6 11,5 |
| 100 | MJ10×1,25-4h6h | 10 | 19,3 | 1,93 | 15,43 | 4,2 | 0,1 | 008 to 100 | 8 14,5 |
| 120 | MJ12×1,25-4h6h | 12 | 23 | 2,53 | 18,00 | 5 | 0,1 | 010 to 100 | 10 16 |

| Code | Thread ^a Designation | <i>P</i> nom. | <i>Tol.</i> | <i>Q</i> nom. | <i>Tol.</i> | <i>R</i> max. | <i>R</i> min. | <i>V</i> mm | Recess code ^b |
|-------------|--|------------------|-------------|------------------|-------------|------------------|------------------|----------------|---|
| 030 | MJ3×0,5-4h6h | 0,8 | 0 -0,1 | 2,3 | 0 -0,5 | | | | EN3911-09 |
| 040 | MJ4×0,7-4h6h | 1 | | 2,9 | | 0,4 | 0,2 | 0,13 | EN3911-15 |
| 050 | MJ5×0,8-4h6h | 1,1 | 0 -0,2 | 3,8 | | | | | EN3911-20 |
| 060 | MJ6×1-4h6h | 1,5 | | 4,5 | | 0,5 | 0,3 | | EN3911-27 |
| 080 | MJ8×1-4h6h | 2 | 0 -0,38 | 6,2 | ±0,5 | 0,7 | 0,5 | 0,25 | EN3911-40 |
| 100 | MJ10×1,25-4h6h | 2,3 | 0 -0,5 | 7,9 | | 0,7 | 0,5 | | EN3911-45 |
| 120 | MJ12×1,25-4h6h | 2,8 | | 9,9 | | 0,8 | 0,6 | | EN3911-50 |

^aConforms to ISO 5855-2.
^bSee EN 3911.

4 Designation

EXAMPLE

