

Aerospace series - Screws, pan head, six lobe recess,
coarse tolerance normal shank, medium length thread,
in titanium alloy, anodized, MoS2 lubricated -
Classification: 1 100 MPa (at ambient temperature) /
315 °C

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 4178:2017 sisaldab Euroopa standardi EN 4178:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 4178:2017 consists of the English text of the European standard EN 4178:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 18.01.2017.	Date of Availability of the European standard is 18.01.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

**Aerospace series - Screws, pan head, six lobe recess, coarse
tolerance normal shank, medium length thread, in
titanium alloy, anodized, MoS2 lubricated - Classification:
1 100 MPa (at ambient temperature) / 315 °C**

Série aérospatiale - Vis à tête cylindrique, à empreinte
six lobes, tige normale à tolérance large, filetage
moyen, en alliage de titane, anodisées, lubrifiées MoS2
- Classification: 1 100 MPa (à température ambiante) /
315 °C

Luft- und Raumfahrt - Flachkopfschrauben mit Sechs-
Bogenzahn, mit mittlerer Gewindelänge, aus
Titanlegierung, anodisiert, MoS2-geschmiert - Klasse: 1
100 MPa (bei Raumtemperatur) / 315 °C

This European Standard was approved by CEN on 4 March 2016.

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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 4178:2017) 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 European 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 July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

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This document supersedes EN 4178:2009.

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1 Scope

This European Standard specifies the characteristics of screws, pan head, six lobe recess, coarse tolerance normal shank, medium length thread, in titanium alloy, anodized, MoS₂ lubricated.

Classification: 1 100 MPa ¹⁾ / 315 °C ²⁾.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN 2491, *Aerospace series — Molybdenum disulphide dry lubricants — Coating methods*

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

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defense Organizations*

EN 9133, *Aerospace series - Quality management systems - Qualification procedure for aerospace standard parts*

ISO 3353-1, *Aerospace — Lead and runout threads — Part 1: Rolled external threads* ³⁾

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts* ³⁾

ISO 7913, *Aerospace — Bolts and screws, metric — Tolerances of form and position* ³⁾

ISO 9152, *Aerospace — Bolts, with MJ threads, in titanium alloys, strength class 1 100 MPa — Procurement specification* ³⁾

TR 3775, *Aerospace series — Bolts and pins — Materials* ⁴⁾

TR 4070, *Aerospace series — Molybdenum disulphide coatings — List of commercial products* ⁴⁾

1) Minimum tensile strength of the material at ambient temperature.

2) Maximum temperature that the screw can withstand without continuous change in its original characteristics, after return to ambient temperature. The maximum temperature is determined by the surface treatment.

3) Published by: ISO International Organization for Standardization (<http://www.iso.ch/>)

4) Published as ASD-STAN Technical Report at the date of publication of this European Standard by AeroSpace and Defence industries Association of Europe - Standardization (ASD-STAN) (www.asd-stan.org)