





EUROPEAN STANDARD

**EN 4163**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2026

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Supersedes EN 4163:2016

English Version

**Aerospace series - Screws 100° countersunk normal head,  
offset cruciform recess, coarse tolerance normal shank,  
long thread, in alloy steel, cadmium plated - Classification:  
1 100 MPa (at ambient temperature) / 235 °C**

Série aérospatiale - Vis à tête fraisée 100° normale, à  
empreinte cruciforme déportée, tige normale à  
tolérance large, filetage long, en acier allié, cadmiée -  
Classification : 1 100 MPa (à température  
ambiante)/235 °C

Luft- und Raumfahrt - 100° Senkschrauben mit  
Flügelkreuzschlitz, langes Gewinde, aus legiertem  
Stahl, verkadmet - Klasse: 1 100 MPa (bei  
Raumtemperatur)/235 °C

This European Standard was approved by CEN on 2 February 2026.

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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  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**EN 4163:2026 (E)**

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## European foreword

This document (EN 4163:2026) 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of an identical text or by endorsement, at the latest by September 2026, and conflicting national standards shall be withdrawn at the latest by September 2026.

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 4163:2016.

EN 4163:2026 includes the following significant technical changes with respect to EN 4163:2016:

- normative references updated;
- Figure 1, “Configuration”, updated;
- surface treatment updated;
- Table 2, “Drive codes”, updated;
- Bibliography updated.

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.

**EN 4163:2026 (E)****1 Scope**

This document specifies the characteristics of screws, 100° countersunk normal head, offset cruciform recess, coarse tolerance normal shank, long thread, in alloy steel, cadmium plated.

Classification: 1 100 MPa<sup>1</sup>/235 °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 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength  $\leq 1\,450$  MPa, copper, copper alloys and nickel alloys*

EN 2137, *Aerospace series — Steel FE-PL75 —  $1\,100\text{ MPa} \leq R_m \leq 1\,250\text{ MPa}$  — Bars —  $D_e \leq 100\text{ mm}$*

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

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 7689, *Aerospace series — Bolts, with MJ threads, made of alloy steel, strength class 1 100 MPa — Procurement specification*

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

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

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

TR 3775,<sup>3</sup> *Aerospace series — Bolts and pins — Materials*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**

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

<sup>2</sup> 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.

<sup>3</sup> Published as ASD-STAN TR, available at: <https://www.asd-stan.org>.