

**Aerospace series - Nuts, anchor, self-locking, fixed, closed corner, reduced series, with counterbore -  
Classification: 1 100 MPa/235 °C**

Aerospace series - Nuts, anchor, self-locking, fixed, closed corner, reduced series, with counterbore -  
Classification: 1 100 MPa/235 °C

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 2856:2006 sisaldab Euroopa standardi EN 2856:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 31.07.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 2856:2006 consists of the English text of the European standard EN 2856:2006.</p> <p>This document is endorsed on 31.07.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

<p><b>Käsitlusala:</b></p> <p>This standard specifies requirements for closed corner, counterbored, fixed, reduced series anchor nuts, with a self-locking feature achieved by forming the upper portion out-of-round. These nuts are intended for use in aircraft assemblies, in which the fasteners are mainly objected to shear loads. The counterbore is deep enough to accommodate a bolt shank in excess of assembly thickness, as well as the incomplete threads.</p>	<p><b>Scope:</b></p> <p>This standard specifies requirements for closed corner, counterbored, fixed, reduced series anchor nuts, with a self-locking feature achieved by forming the upper portion out-of-round. These nuts are intended for use in aircraft assemblies, in which the fasteners are mainly objected to shear loads. The counterbore is deep enough to accommodate a bolt shank in excess of assembly thickness, as well as the incomplete threads.</p>
--	--

ICS 49.030.30

Võtmesõnad:

ICS 49.030.30

English Version

Aerospace series - Nuts, anchor, self-locking, fixed, closed  
corner, reduced series, with counterbore - Classification: 1 100  
MPa/235 °C

Série aérospatiale - Écrous à river à freinage interne fixes,  
angle fermé, série réduite avec chambrage - Classification :  
1 100 MPa/235 °C

Luft- und Raumfahrt - Anniemuttern, selbstsichernd,  
einseitiger verkürzter Eck-Flansch mit zylindrischer  
Aussenkung - Klasse: 1 100 MPa/235 °C

This European Standard was approved by CEN on 9 March 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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 United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents		Page
Foreword.....		3
1	Scope .....	4
2	Normative references .....	4
3	Required characteristics.....	5
4	Designation .....	7
5	Marking .....	7
6	Technical specification .....	7

## Foreword

This European Standard (EN 2856:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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 December 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

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, 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.

## 1 Scope

This standard specifies requirements for closed corner, counterbored, fixed, reduced series anchor nuts, with a self-locking feature achieved by forming the upper portion out-of-round.

These nuts are intended for use in aircraft assemblies, in which the fasteners are mainly objected to shear loads. The counterbore is deep enough to accommodate a bolt shank in excess of assembly thickness, as well as the incomplete threads.

They are intended to be used with threaded parts of 1 100 MPa <sup>1)</sup> tensile strength classification.

The cadmium plating restricts the application to temperature not exceeding 235 °C.

## 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 3222, *Aerospace — Nuts, anchor, self-locking, fixed, closed corner, reduced series, with counterbore, with MJ threads, classifications: 1 100 MPa (at ambient temperature)/235 °C, 1 100 MPa (at ambient temperature)/315 °C and 1 100 MPa (at ambient temperature)/425 °C — Dimensions.*

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

ISO 5858, *Aerospace — Nuts, self-locking, with maximum operating temperature less than or equal to 425 °C — Procurement specification.*

ISO 8788, *Aerospace — Nuts, metric — Tolerances of form and position.*

EN 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength  $\leq 1\,450$  MPa, copper, copper alloys and nickel alloys.*

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

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

EN 2542, *Aerospace series — Steel FE-PL43S — Annealed — Bar and wire —  $D_e \leq 40$  mm — for prevailing torque nuts.* <sup>2)</sup>

EN 2543, *Aerospace series — Steel FE-PL43S — Annealed — Sheet and strip —  $0,3 \leq a \leq 2$  mm — for prevailing torque nuts.* <sup>2)</sup>

EN 9100, *Aerospace series — Quality management systems — Requirements (based on ISO 9001:2000) and Quality systems — Model for quality assurance in design, development, production, installation and servicing (based on ISO 9001:1994).*

---

1) This strength class applies at room temperatures.

2) Published as AECMA Prestandard at the date of publication of this standard.