Aerospace series - Nuts, hexagon, self-locking by plastic ring, normal height, normal across flats, in corrosion resisting steel, passivated - Classification: 900 MPa (at ambient temperature) / 120 °C



# EESTI STANDARDI EESSÕNA

# NATIONAL FOREWORD

	This Estonian standard EVS-EN 4297:2017 consists of the English text of the European standard EN 4297:2017.		
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.		

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

## ICS 49.030.30

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# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 4297

January 2017

ICS 49.030.30

# **English Version**

Aerospace series - Nuts, hexagon, self-locking by plastic ring, normal height, normal across flats, in corrosion resisting steel, passivated - Classification: 900 MPa (at ambient temperature) / 120 °C

Série aérospatiale - Écrous hexagonaux, à freinage interne par bague plastique, hauteur normale, surplats normaux, en acier résistant à la corrosion, passivés - Classification: 900 MPa (à température ambiante) / 120 °C

Luft- und Raumfahrt - Sechskantmuttern, selbstsichernd mit Plastikring, mit normaler Schlüsselweite, aus korrosionsbeständigem Stahl, passiviert - Klasse: 900 MPa (bei Raumtemperatur) / 120°C

This European Standard was approved by CEN on 11 March 2016.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

# Contents

	$O_{i}$	rage
Eur	ropean foreword	3
1	Scope	
2	Normative references	
3	Required characteristics	4
4	Designation	6
5	Marking	7
6	Technical specification	7
2		0'

# **European foreword**

This document (EN 4297:2017) 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.

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.

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# 1 Scope

This European Standard specifies the characteristics of hexagonal nuts, self-locking by plastic ring, normal height, normal across flats, in corrosion resisting steel, passivated.

Classification: 900 MPa 1) / 120 °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 2516, Aerospace series — Passivation of corrosion resisting steels and decontamination of nickel base alloys

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 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 degrees C — Procurement specification

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

# 3 Required characteristics

#### 3.1 Configuration - Dimensions - Masses

See Figure 1 and Table 1.

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

Details of form not stated are at the manufacturer's option.

### 3.2 Tolerances of form and position

ISO 8788.

<sup>1)</sup> Corresponds to the minimum tensile stress which the nut is able to withstand at ambient temperature without breaking or cracking when tested with a bolt of a higher strength class.

<sup>2)</sup> Maximum temperature that the nut is able to withstand, without permanent alteration to its original characteristics, after ambient temperature has been restored. The maximum temperature is conditioned by the plastic ring.