

# SLOVENSKI STANDARD SIST EN 2879:2017

01-marec-2017

Aeronavtika - Zakovne matice, samovarovalne, vremensko odporne, tesnilne, premične, z obojestransko prirobnico, z valjasto poglobitvijo, iz korozijsko odpornega jekla, pasivirane, mazane z MoS2 - Klasifikacija: 900 MPa (pri temperaturi okolice)/235 °C

Aerospace series - Nuts, anchor, self-locking, air resistant, sealing, floating, two lug, with counterbore, in corrosion resisting steel, passivated, MoS2 lubricated - Classification: 900 MPa (at ambient temperature) / 235°C

iTeh STANDARD PREVIEW

Luft- und Raumfahrt - Annietmuttern, selbstsichernd, luftbeständig, druckdicht, beweglich, beiderseitiger Flansch, mit zylindrischer Aussenkung, aus korrosionsbeständigem Stahl, passiviert; MoS2-geschmiert - Klasse: 900 MPa (bei Raumtemperatur) / 235 Gindards.iteh.ai/catalog/standards/sist/d45ed37b-dcd2-49bb-95bf-2b1512a28d71/sist-en-2879-2017

Série aérospatiale - Écrous à river, à freinage interne, étanches à l'air, flottants, double patte, avec chambrage, en acier résistant à la corrosion, passivés, lubrifiés MoS2 - Classification: 900 MPa (à température ambiante) / 235°C

Ta slovenski standard je istoveten z: EN 2879:2017

ICS:

49.030.30 Matice Nuts

SIST EN 2879:2017 en,fr,de

SIST EN 2879:2017

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 2879:2017 https://standards.iteh.ai/catalog/standards/sist/d45ed37b-dcd2-49bb-95bf-2b1512a28d71/sist-en-2879-2017 EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN 2879** 

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ICS 49.030.30

#### **English Version**

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This European Standard was approved by CEN on 4 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.

SIST EN 2879:2017

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

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# **European foreword**

This document (EN 2879:2017) 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.

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, 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 the United Kingdom.

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# 1 Scope

This European Standard specifies the characteristics of self-locking, air resistant, sealing, floating, two lug anchor nuts, with counterbore, in corrosion resisting steel, passivated, MoS<sub>2</sub> lubricated.

Classification: 900 MPa 1) / 235 °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 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: iteh.ai/catalog/standards/sist/d45ed37b-dcd2-49bb-95bf-2b1512a28d71/sist-en-2879-2017

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

ISO 8940, Aerospace — Nuts, anchor, self-locking, sealing, floating, two-lug, with counterbore, with MJ threads, classifications: 900 MPa (at ambient temperature)/120 degrees C, 900 MPa (at ambient temperature)/175 degrees C and 900 MPa (at ambient temperature)/235 degrees C — Dimensions

SAE AMS 3304G, Silicone Rubber, General Purpose, 70 Durometer 3)

TR 3791, Aerospace series — Materials for self-locking nuts, threaded inserts and screw thread inserts of temperature classes  $\leq 425 \, ^{\circ}\text{C}^{4}$ )

<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 seal material.

<sup>3)</sup> Published by: SAE National (US) Society of Automotive Engineers <a href="http://www.sae.org/">http://www.sae.org/</a>

<sup>&</sup>lt;sup>4</sup>) 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) (<u>www.asd-stan.org</u>)

## 3 Required characteristics

## 3.1 Configuration - Dimensions - Masses

See Figure 1 and Table 1.

Dimensions and tolerances are: in conformity with ISO 8940, expressed in millimetres and apply after surface treatment but before MoS<sub>2</sub> lubrication.

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

### 3.2 Tolerances of form and position

ISO 8788

#### 3.3 Materials

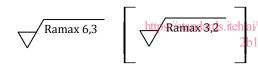
Cage, seal retainer and nut element: TR 3791.

Sealing ring: rubber, air resistant per SAE AMS 3304 or equivalent.

#### 3.4 Surface treatments

Cage and seal retainer: EN-2516STANDARD PREVIEW

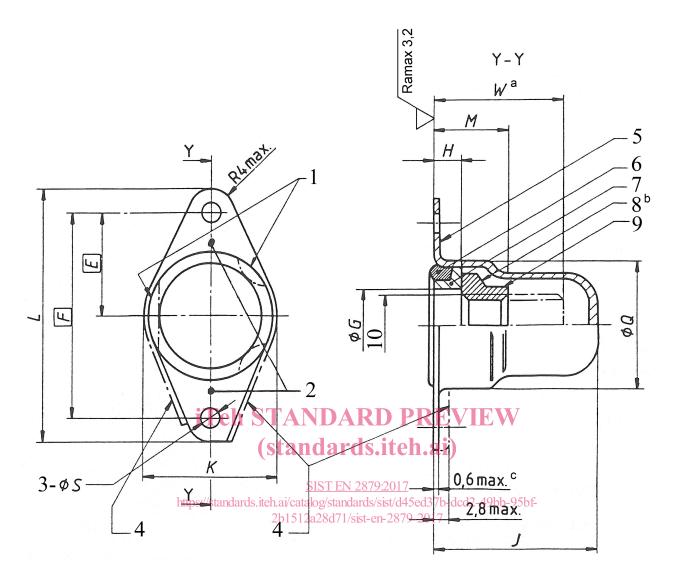
Nut element: EN 2491, thickness not specified, mandatory on threads, optional on other surfaces



These values in micrometres apply before surface treatment.

They do not apply to threads, punched holes or sheared edges the surface texture of which will be as achieved by usual manufacturing methods.

Remove sharp edges 0,1 to 0,4.



#### Key

- 1 Threaded element anti-rotational device (form at manufacturer's discretion)
- 2 Marking
- 3 2 holes
- 4 Choice of flange at manufacturer's discretion
- 5 Cage
- 6 Seal
- 7 Seal retainer
- 8 Nut element b
- 9 Form out-of-round in this area to achieve the self-locking requirement (tooling marks permissible)
- a Maximum bolt thread intrusion
- b Minimum radial float of nut element: 0,5
- c Lug thickness at the rivet location

Figure 1