



BSI Standards Publication

**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**

National foreword

This British Standard is the UK implementation of EN 2879:2017.

The UK participation in its preparation was entrusted to Technical Committee ACE/12, Aerospace fasteners and fastening systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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EUROPEAN STANDARD

EN 2879

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2017

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English Version

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

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

Luft- und Raumfahrt - Anniemuttern, selbstsichernd, luftbeständig, druckdicht, beweglich, beiderseitiger Flansch, mit zylindrischer Aussenkung, aus korrosionsbeständigem Stahl, passiviert, MoS2-geschmiert - Klasse: 900 MPa (bei Raumtemperatur)/235 °C

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

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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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

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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, MoS₂ 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*

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 ≤ 425 °C* ⁴⁾

1) 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.

2) 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.

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

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)

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 MoS₂ lubrication.

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

3.2 Tolerances of form and position

ISO 8788

3.3 Materials

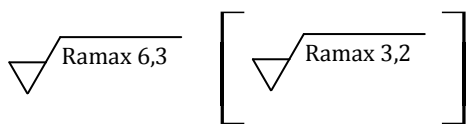
Cage, seal retainer and nut element: TR 3791.

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

3.4 Surface treatments

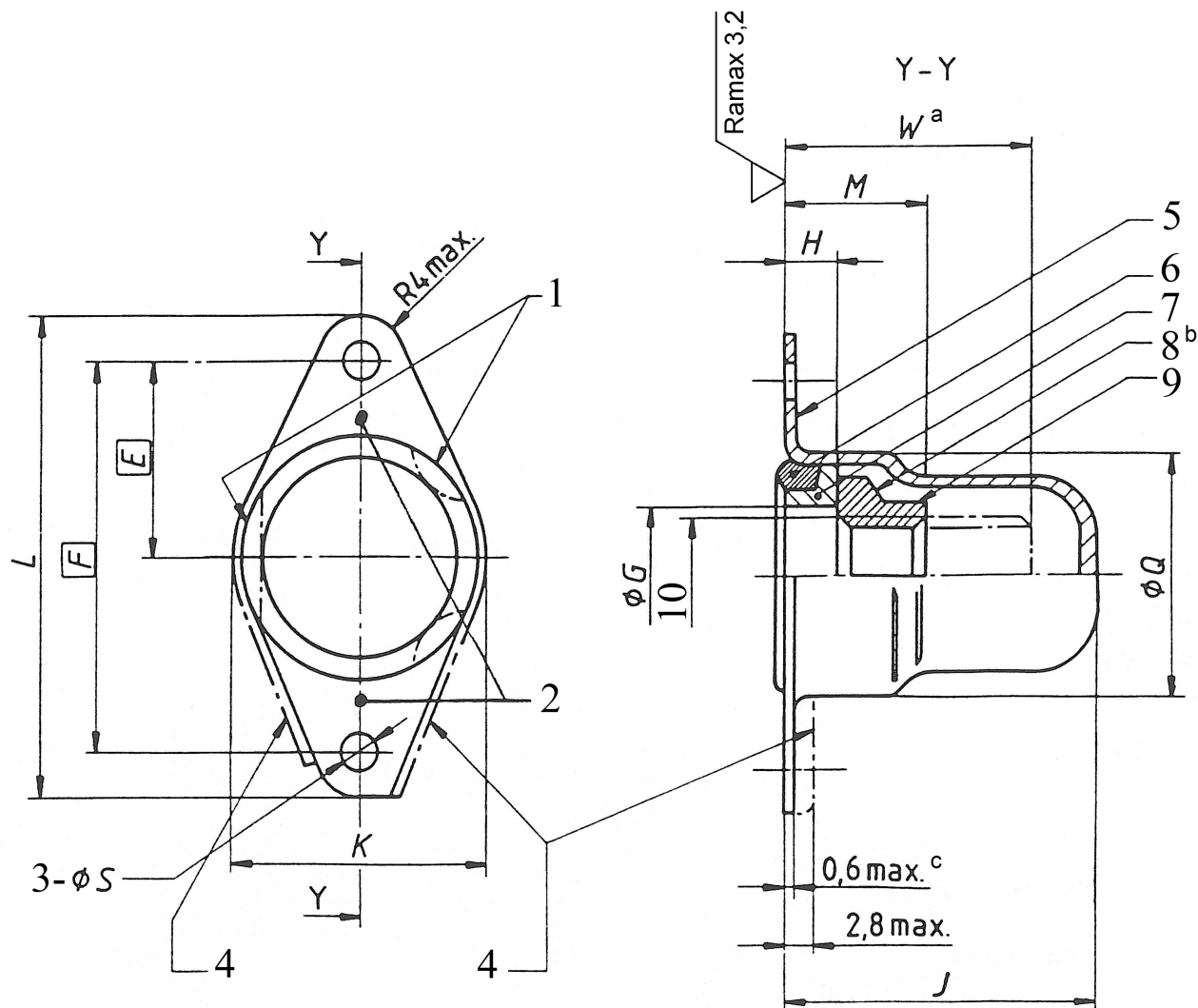
Cage and seal retainer: EN 2516

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

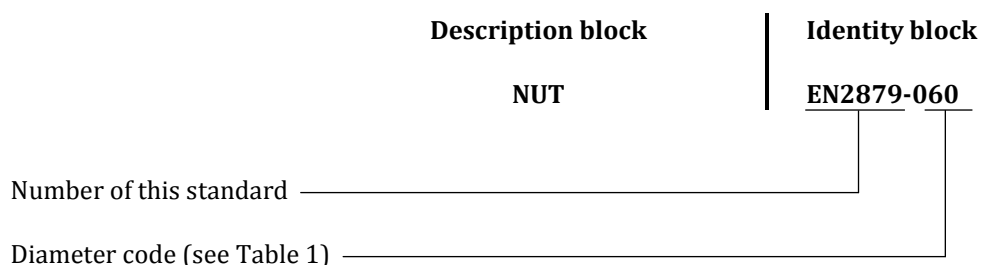
Table 1

Diameter code	Thread ^a	E	F	G	H	J	K	L	M	Q	S	W	Mass ^b
				min.	min.	max.	max.	max.	max.	max.	+0,2 0	max.	
050	MJ5×0,8-4H6H	9,5	19	6	3,4	16,2	14,4	24,6	7,9	12,5	2,5	14,4	4,3
060	MJ6×1-4H5H	11	22	7	4,1	19,2	17	29	9,5	16		17,4	7
080	MJ8×1-4H5H	13	26	9		20,3	19,4	32,5	11,3	18,5		3	18,5

^a In accordance with ISO 5855-2. In the self-locking zone the tolerances apply before forming out-of-round.
^b Approximate values (kg/1 000 pieces), given for information purposes only.

4 Designation

EXAMPLE



NOTE If necessary, the code I9005 shall be placed between the description block and the identity block.

5 Marking

EN 2424, style N. See Figure 1.

6 Technical specification

ISO 5858, except for:

- Approval of manufacturers: see EN 9100;
- Qualification of products: see EN 9133.

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