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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46103-2025

**Reduced series fixed closed corner anchor self-locking nuts
with counterbore and MJ threads for aerospace**

航空航天用带沉头窝的MJ螺纹减小型封闭角形托板自锁螺母

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is modified to adopt ISO 3222:1998(E) "Aerospace 1100MPa (ambient temperature)/235°C, 1100MPa (ambient temperature)" Temperature)/315°C and 1100MPa (ambient temperature)/425°C MJ Thread Countersunk Hole Reduction Series Self-Locking Nuts with Angles Less Than 90° size".

This document includes a new chapter on "Terms and Definitions".

The technical differences between this document and ISO 3222:1998, and the reasons therefor, are as follows.

---The normative reference to ISO 5858 (see Chapter 3 of ISO 3222:1998) has been removed; this part of the technical content is to be determined by the user.

Relevant requirements to adapt to my country's technological conditions;

---The provision that "unspecified details are determined by the manufacturer" (see Chapter 4) has been removed to comply with domestic requirements;

--- Replace ISO 5855-2:1999 with the normatively referenced GB/T 43924.2-2024 (see Table 1) to adapt to my country's technical conditions.

The components provide operability.

The following editorial changes have been made to this document.

---To harmonize with existing standards, the standard name has been changed to "Aerospace-grade MJ threaded reduced-size closed-angle support plate with countersunk notch".

Lock Nuts;

---The presentation of the structure diagram has been modified (see Figure 1) to better align with domestic industry drawing practices;

---The representation of letters in the structural dimensions (see Figure 1 and Table 1) and the order of letters in the table (see Table 1) have been modified to better conform to national standards.

Industry-specific labeling conventions;

---The requirements regarding the optional form with a sealing cover have been revised and described in the figure (see Figure 1) to better suit domestic usage habits.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Aircraft Standardization Technical Committee (SAC/TC435).

1 Scope

This document specifies the aerospace-grade MJ threaded reduced-size closed-angle self-locking nut with countersunk head (hereinafter referred to as "self-locking nut").

The structure and dimensions of the mother () are as follows, with strength grades of 1100MPa1)/235°C2), 1100MPa1)/315°C2) and 1100MPa1)/425°C2).

This document applies to the design of MJ threaded reduced-size closed-angle self-locking nuts with countersunk head for aerospace applications.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 43924.2-2024 Aerospace MJ Threads Part 2: Bolts and Nuts (ISO 5855-2:1999, MOD) ISO 8788 Aerospace Fasteners - Tolerances of Form and Position (Nuts)

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4 Structure and Dimensions

The structure and dimensions of the self-locking nut shall conform to the specifications in Figure 1 and Table 1.

The dimensions and tolerances of the self-locking nut are based on the condition of the part surface after coating and before lubrication.

1) The minimum tensile load that a self-locking nut can withstand at ambient temperature when tested using bolts of the highest strength grade, without undergoing [further stress/damage].

destroy.

2) After the self-locking nut has been subjected to the maximum operating temperature, it will not permanently change its original properties upon returning to room temperature. The maximum operating temperature depends on the material of the self-locking nut.

Or surface treatment status.