

ICS 49.030.20
CCS V 20



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

GB/T 45735-2025

1 100 MPa large hexagonal head MJ threads bolts for aerospace

航空航天用1100MPa大六角头MJ螺纹螺栓

(English Translation)

Issued on: May 30, 2025

Implemented on: December 1, 2025

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Configuration and dimensions

Foreword

This document is in accordance with the rules of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is modified to adopt ISO 9256:1993 "Aerospace strength level less than or equal to 1100MPa, with or without coating, metal Dimensions of large hexagonal head bolts with standard diameter or medium diameter shank and long MJ thread made of metal materials.

This document has made the following structural adjustments compared to ISO 9256:1993.

--- Added a chapter on "Terms and Definitions" (see Chapter 3).

The technical differences between this document and ISO 9256:1993 and their reasons are as follows.

--- Deleted "Details not specified are subject to the manufacturer's provisions" (see Chapter 3 of ISO 9256:1993) to meet domestic requirements;

--- Added the requirements that threads and thread ends should meet (see Chapter 4), which can better guide bolt manufacturing;

---Increased the surface roughness of the bolt (see Figure 1), which can better guide the bolt manufacturing;

--- Deleted the rod diameter corresponding to the middle diameter rod (see Table 1 of ISO 9256:1993), which is more in line with the actual domestic use;

--- ISO 286-2:1988 (see Table 1) is replaced by the normative reference GB/T 1800.2-2020 to adapt to the technical requirements of my country parts, increasing operability;

--- ISO 5855-2:1999 (see Table 1) was replaced by the normative reference GB/T 43924.2-2024 to adapt to my country's technical requirements parts, increasing operability;

- Increased the tolerance of the size of the fuse hole position P on the head (see Table 1), which can better guide the bolt manufacturing;
- Added a comparison table of bolt length and nominal diameter (see Table 2) to better guide bolt manufacturing and selection. The following editorial changes were made to this document.
- In order to coordinate with the existing standards, the name of the standard is changed to "1100MPa large hexagon head MJ threaded bolts for aerospace use";
- Added rounding or chamfering notes (see Figure 1) to better guide bolt manufacturing;
- Changed some dimension marking symbols of bolts (see Figure 1, Figure 2 and Table 1);
- Delete Notes 1, 4, 5 and 6 in Table 1.

1 Scope

This document specifies the structural and dimensional requirements for 1100MPa large hexagon head MJ threaded bolts (hereinafter referred to as bolts) for aerospace use.

This document applies to the design, production and use of 1100MPa large hexagon head MJ thread bolts for aerospace use.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 1800.2-2020 Geometrical Product Specifications (GPS) Linear Dimension Tolerances ISO Code System Part 2: Standards Tolerance zone codes and limit deviation tables for holes and shafts (ISO 286:2010, MOD)

GB/T 43924.2-2024 Aerospace MJ threads Part 2: Limit sizes of bolt and nut threads (ISO 5855-2. 1999,MOD)

ISO 3353-1:2020 Aerospace Lead and Rolled External Threads Part 1: Rolled External Threads

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Configuration and dimensions

The structure and dimensions of the bolts are shown in Figure 1, Figure 2, Table 1 and Table 2. The dimensions and tolerances are applicable after the surface is coated and before lubrication.

The thread should comply with the provisions of GB/T 43924.2-2024, and the thread start and end should comply with the provisions of ISO 3353-1:2020.