

ICS 21.060.10

CCS J 13



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

GB/T 31.3-2025

Replacing GB/T 31.3-1988

**Fasteners - Hexagon head bolts with split pin hole on shank -
Part 3: Fine pitch thread**

紧固件 六角头螺杆带孔螺栓 第3部分：细牙螺纹

Issued on: October 31, 2025

Implemented on: February 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Foreword	3
Introduction	5
1 Scope	6
2 Normative References	6
3 Terms and Definitions	7
4 Types and Dimensions	7
5 Technical Requirements	9
6 Markings and Labels	10
7 Designation	10
Bibliography	12

Foreword

This document was drafted in accordance with the rules provided in GB/T 1.1-2020 Directives for Standardization - Part 1: Rules for the Structure and Drafting of Standardizing Documents.

This is Part 3 of the series of national standards GB/T 31 Hexagon Head Bolts with Split Pin Hole on Shank. GB/T 31 has issued the following parts.

- GB/T 31.1 Hexagon Bolts with Split Pin Hole on Shank;
- GB/T 31.2 Fasteners - Hexagon Head Bolts with Split Pin Hole on Shank - Part 2.

Reduced Shank - Product Grade B;

- GB/T 31.3 Fasteners - Hexagon Head Bolts with Split Pin Hole on Shank - Part 3: Fine Pitch Thread.

This document serves as a replacement for GB/T 31.3-1988 Hexagon Bolts with Split Pin Hole on Shank - Fine Pitch Thread - Product Grade A and B. In comparison with GB/T 31.3-1988, apart from structural adjustments and editorial modifications, the main technical changes are as follows.

- a) In accordance with GB/T 5785, M10?1.25, M12?1.25, M18?2, M20?1.5 and M22?2 specifications are added (see Table 1);
- b) In accordance with the provisions for the "le" dimension in GB/T 5278, the "lh" dimension is modified (Table 1; Table 2 of Version 1988);

- c) A Table of technical requirements and referenced standards is added (see Table 2);
- d) "Markings and Labels" is added (see Chapter 6).

Please be noted that certain content of this document may involve patents. The institution issuing this document does not undertake the responsibility of identifying these patents.

This document was proposed by China Machinery Industry Federation.

This document shall be under the jurisdiction of Technical Committee 85 on Fasteners of Standardization Administration of China (SAC/TC 85).

The drafting organizations of this document. China Machinery Productivity Promotion Center Co., Ltd.; Zhejiang RuiZhao Technology Co., Ltd.; Yuhuan Chunhui Axle Co., Ltd.; Zhejiang Meiri Intelligent Equipment Co., Ltd.; Yuhuan Tuoyue Machinery Co., Ltd.

This document is subject to interpretation by Technical Committee 85 on Fasteners of Standardization Administration of China.

The issuing of the previous versions.

Fasteners - Hexagon Head Bolts with Split Pin Hole on Shank - Part 3: Fine Pitch Thread

1 Scope

This document specifies the types, dimensions, technical requirements, markings, labels and designation of hexagonal head bolts with split pin holes on shank, with fine pitch thread.

This document applies to hexagonal head bolts with split pin holes on shank with thread specifications of M8?1 ~ M48?3, fine pitch thread, property grades of 8.8, 10.9, 12.9/12.9, A2- 50, A2-70, A4-50, A4-70, A4-80, D4-70, D4-80, D6-70 and D6-80, and product grades of A and B (hereinafter referred to as the "bolts").

The bolts specified in this document have split pin holes formed in the shank section of the products specified in GB/T 5785.

2 Normative References

GB/T 90.1

GB/T 90.2

GB/T 197

GB/T 1237

GB/T 3098.1

GB/T 3098.6

GB/T 3099.4

GB/T 3103.1

GB/T 5267.1

GB/T 5267.2

GB/T 5276

GB/T 5278

GB/T 5779.1

GB/T 5785

GB/T 16938

3 Terms and Definitions

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

4 Types and Dimensions

The bolt type shall be as shown in Figure 1, and the dimensions shall be as shown in Table 1.

Dimensions for other types shall conform to the provisions of GB/T 5785.

Dimension codes and designations shall conform to GB/T 5276.