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

GB/T 196-2025

**General purpose metric screw threads - Basic dimensions
(English Translation)**

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020

Directives for standardization - Part 1. Rules for the structure and drafting of standardizing documents.

GB/T 196 General purpose metric screw threads - Basic dimensions together with GB/T 192 General purpose metric screw threads - Profiles, GB/T 193 General purpose metric screw threads - General plan, GB/T 197 General purpose metric screw threads - Tolerances, GB/T 2516 General purpose metric screw threads - Limit deviations, GB/T 9144 General purpose metric screw threads - Preferable plan, GB/T 9145 General purpose metric screw threads - Limits of sizes for the screw threads of medium quality and preferable plan and GB/T 15756 General purpose metric screw threads - Limits of sizes constitute the national standard system of "General purpose metric screw threads".

This document replaces GB/T 196-2003 General purpose metric screw threads - Basic dimensions. Compared with GB/T 196-2003, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- The "basic dimensions" are replaced with "design profile" (see Chapter 1, Figure 1, and Table 1; see Chapter 1, Figure 1, and Table 1 of the 2003 edition);
- The codes d3, H1 and h3 are added, and delete the code d1 is deleted (see Chapter

4; see Chapter 4 of the 2003 edition);

-- The dimension and formula of the minor diameter of external thread d_3 are added, and the dimension and formula of d_1 are deleted (see Chapter 5; see Chapter 5 of the 2003 edition);

-- Three combination series with nominal diameters of 125 mm, 130 mm, and 140 mm and a pitch of 8 mm are added (see Table 1).

This document is modified in relation to ISO 724.2023 ISO general purpose metric screw threads - Basic dimensions.

The technical differences between this document and ISO 724.2023 and their reasons are as follows.

-- ISO 5408 is replaced with the normative reference GB/T 14791 (see Chapter 3) to adapt to Chinese technical conditions and increase operability;

-- The basic dimension provisions are modified (see Chapter 5) to clarify their required attributes.

General purpose metric screw threads - Basic dimensions

1 Scope

This document specifies the basic dimensions of regular screw threads (general purpose metric screw threads M) based on the design profiles of GB/T 192 and the diameter and pitch series of GB/T 193.

This document applies to metric fastening threads.

2 Normative references

The provisions of the following documents constitute the essential clauses of this document through normative references in this text. Among them, for referenced documents with dates, only the versions corresponding to the dates are applicable to this document; for referenced documents without dates, the latest versions (including all amendments) are applicable to this document.

GB/T 14791 Screw threads - Vocabulary (GB/T 14791-2013, ISO 5408.2009, IDT)

3 Terms and definitions

The terms and definitions defined in GB/T 14791 apply to this document.

4 Codes

The following codes apply to this document.

D Major diameter of internal thread (nominal diameter)

d Major diameter of external thread (nominal diameter)

D2 Pitch diameter of internal thread

d2 Pitch diameter of external thread

D1 Minor diameter of internal thread

d3 Minor diameter of external thread on the design profile

P Pitch

H Fundamental triangle height

H1 Thread height of internal thread on the design profile

h3 Thread height of external thread on the design profile

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