# **INTERNATIONAL STANDARD**

**ISO** 724

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## ISO general purpose metric screw threads — Basic dimensions

etage. Filetages métriques ISO pour usages généraux — Dimensions de base



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Coi	ntents	Page
Fore	eword	iv
1	Scope	1
2	Normative references	
3	Terms and definitions	1
4	Symbols	1
5	Basic dimensions	2
	iography	

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 1, Screw threads.

This third edition cancels and replaces the second edition (ISO 724:1993), which has been technically revised. It also incorporates the Technical Corrigendum ISO 724:1993/Cor 1:2009.

The main changes are as follows:

- "basic profile" has been replaced with "design profile" in the Scope;
- a second paragraph has been added in the Scope;
- three symbols,  $d_3$ ,  $H_1$  and  $h_3$ , have been added in Clause 4;
- the values and formula for the minor diameter of external thread,  $d_3$ , have been added in <u>Table 1</u> and <u>Clause 5</u>;
- ISO 68-1 and ISO 261 have been added in the Bibliography.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

# ISO general purpose metric screw threads — Basic dimensions

### 1 Scope

This document specifies the basic dimensions of ISO general purpose metric screw threads according to ISO 261. The values refer to the design profiles according to ISO 68-1.

This document is applicable to the metric fastening screw threads.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5408, Screw threads — Vocabulary

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5408 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="https://www.electropedia.org/">https://www.electropedia.org/</a>

### 4 Symbols

For the purposes of this document, the following symbols apply.

- D major diameter of internal thread (nominal diameter)
- d major diameter of external thread (nominal diameter)
- $D_2$  pitch diameter of internal thread
- $d_2$  pitch diameter of external thread
- $D_1$  minor diameter of internal thread
- $d_3$  minor diameter of external thread on design profile
- P pitch
- *H* fundamental triangle height
- $H_1$  thread height of internal thread on design profile
- $h_3$  thread height of external thread on design profile