International Standard

ISO 14617-1

Graphical symbols for diagrams —

Part 1: General rules

Symboles graphiques pour schémas —

Partie 1: Informations générales et index

Third edition
2025-03

Reference number
ISO 14617-1:2025(en)

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Published in Switzerland

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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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 10, *Technical product documentation*, Subcommittee SC 10, *Process plant documentation.*

This third edition cancels and replaces the second edition (ISO 14617-1:2005), which has been technically revised.

The main changes are as follows:

— Clause 3 terms and definitions were changed;

— ”GSD” was added in front of registration numbers;

— symbols using letter codes are not included in the revised ISO 14617 series because the definition of letter codes moved to ISO 15519-2;

— structuring of the presentation of graphical symbols has been changed in order to improve the user’s access to navigate and find symbols;

— annexes have been reconstructed.

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 www.iso.org/members.html.

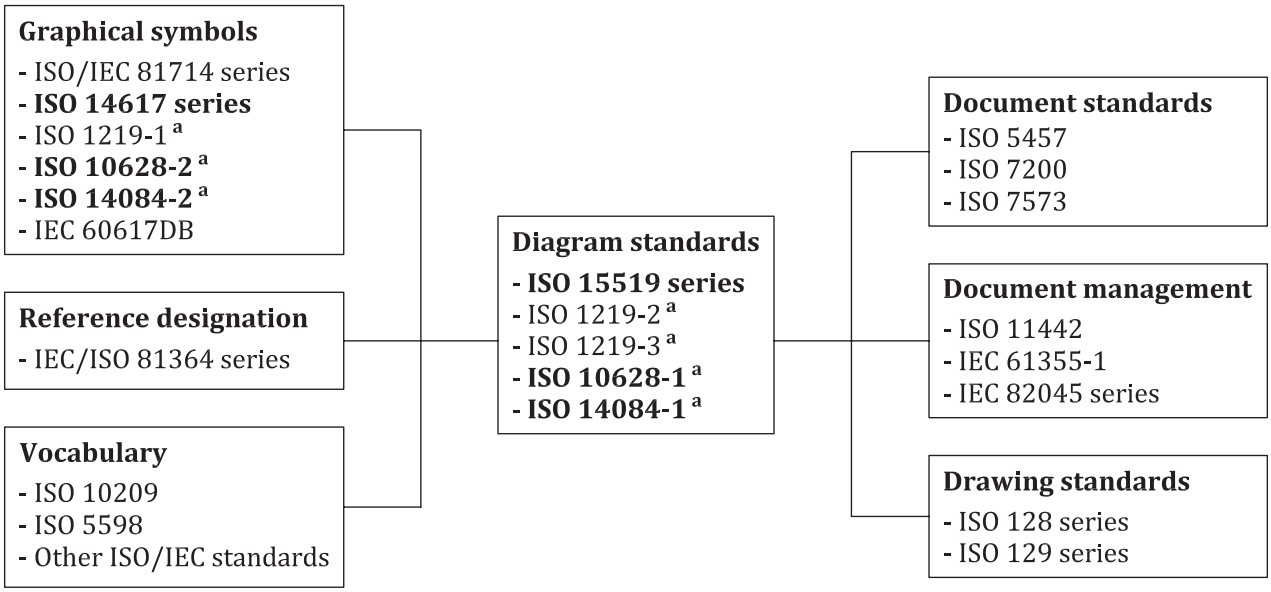
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Introduction

0.1 General

ISO/TC 10 prepares standards for diagrams including graphical symbols, which together with International Standards prepared by other ISO committees and the IEC constitute the basis for the preparation of diagrams.

The interrelations between these International Standards are illustrated in Figure 1. Standards in bold are ISO/TC 10 standards.



Key

a Collective application standards.

Figure 1 — Interrelations between ISO and IEC standards for diagrams

0.2 Collective application standards

Technical committees, requiring a field specific standard, can, in co-operation with ISO/TC 10, develop their own collective application standard for the preparation of diagrams and graphical symbols as per the requirements given in ISO 15519-1 or ISO 14617, or both. Collective application standards are not to be contradictory with respect to the source standard(s).

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Graphical symbols for diagrams —

Part 1:
General rules

1 Scope

This document specifies general rules for and gives guidance on the preparation and presentation of graphical symbols for diagrams, which are related to physical industrial components, products and processing.

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 81714-1, *Design of graphical symbols for use in the technical documentation of products — Part 1: Basic rules*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
graphical symbol
visually perceptible figure with a particular meaning used to transmit information independently of language

Note 1 to entry: The graphical symbol can represent objects of interest, such as products, functions or requirements for manufacturing, quality control, etc.

Note 2 to entry: A graphical symbol is not to be confused with the simplified representation of products which are normally drawn to scale and which can look like a graphical symbol.

Note 3 to entry: The graphical symbol means the same as the technical product documentation symbol (TPD-symbol).

[SOURCE: ISO 81714-1:2010, 3.1, modified — Note 3 to entry has been added.]

3.2
basic symbol
symbol which can be used direct in diagrams or combined with *supplementary symbols* (3.3) to form *symbol examples* (3.5)

3.3
supplementary symbol
symbol which can be combined with a *basic symbol* (3.2) to form a *symbol example* (3.5)

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