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Technical product documentation — Symbols used in technical product documentation — Proportions and dimensions

Documentation technique de produits — Symboles utilisés dans la documentation technique de produits — Proportions et dimensions

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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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 10, *Technical product documentation*, Subcommittee SC 1, *Basic conventions*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS F01, *Technical drawings,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 7083:1983), which has been technically revised.

The main changes to the previous edition are as follows:

— added symbols for standards under ISO/TC 10 and ISO/TC 213.

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

This document is a collection of all the current symbols used in technical product documentation, predominantly created in ISO/TC 10 and ISO/TC 213. The symbols are indexed to the individual standards in which they were created and implemented. The ISO/TC 10/SC 1 validation process ensures the harmonization of symbols.

When developing new symbols for use in technical drawings, new symbols are submitted to ISO/TC 10 for review. ISO/TC 10 will confirm that a duplicate symbol with a different meaning does not exist and will add the new symbol to this document once the originating standard has been approved and published.

The following is a description of the process used for incorporating a new symbol:

a) The originator fills in the new symbol application form.

b) The originator attaches the symbol graphics file per the accepted graphics formats in the form.

c) The originator sends the application and graphics file to ISO/TC 10/SC 1.

d) ISO/TC 10/SC 1 forwards the documents to the validation team (appointed group of experts).

e) The validation team reviews the application and symbol according to the following areas:

   — justification for new symbol;

   — design;

   — conformity with ISO 81714-1;

   — duplication and similarity to existing and registered symbols.

f) The validation team prepares their report and sends the application documents back to ISO/TC 10/SC 1. Rejected proposals are sent back to the originator with an attached cause of rejection.

g) If the new symbol request is approved, the originator is notified and the symbol is appointed a registry number and submitted to ISO Central Secretariat for registration and publication on the ISO Online browsing platform: https://www.iso.org/obp.

h) The approved new symbol is added to the list of symbols to be added to the next revision of this document.

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Technical product documentation — Symbols used in technical product documentation — Proportions and dimensions

1 Scope

This document specifies the recommended proportions for the symbols used in technical product documentation. It gives recommended dimensions based on the grid related to the line width to be used.

This document does not apply to symbols used in process plant documentation, which are covered in ISO 81714-1.

The proportions of the symbols are based on the standard heights of lettering given in ISO 3098-1.

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 3098-1, *Technical product documentation — Lettering — Part 1: General requirements*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

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

4 General conditions

The lettering used with the symbols shall be in accordance with the specifications of ISO 3098-1.

On any one drawing the height, line width and type of lettering of the symbols should be equal to those applied for the dimensioning and other indications on that drawing.

The symbols and their lettering are produced by digital means or may be hand-written (using a rule for drawing the frames) or executed by other appropriate methods (e.g. stencils, transfers, mechanical drawing).

5 Dimensions

Recommended dimensions of the symbols with lettering type A are specified in Table 1; dimensions for those with lettering type B are specified in Table 2.

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