INTERNATIONAL STANDARD

ISO 8039

Second edition
2012-10-01

Microscopes — Values, tolerances and symbols for magnification

Microscopes — Valeurs, tolérances et symboles de grossissement

Reference number
ISO 8039:2012(E)

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Published in Switzerland

Contents

Page

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 8039 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 5, *Microscopes and endoscopes*.

This second edition cancels and replaces the first edition (ISO 8039:1997), which has been technically revised.

Microscopes — Values, tolerances and symbols for magnification

1 Scope

This International Standard specifies a series of values, tolerances and symbols for the magnification of imaging components of light microscopes and defines a number of imaging components and magnifying systems to which they apply.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10934-1, *Optics and optical instruments — Vocabulary for microscopy — Part 1: Light microscopy*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10934-1 apply.

4 Symbols for magnification of imaging components

Table 1 gives the symbols that shall be used when referring to the magnification of imaging components and combinations thereof and gives examples of methods of expression.

5 Values and tolerances for magnification

5.1 Values for magnification

Values for the magnification of imaging components or magnifying systems should be one of the values given in Table 2. The products or quotients of any two values in the table are also to be considered as values within the table. The table may be extended by a factor of 10 per row.

5.2 Tolerance of values of magnification for imaging components

Tolerances of values of magnification shall be as given in Table 3.