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INTERNATIONAL STANDARD

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Optics and optical instruments — Ophthalmic optics — Formers

Optique et instruments d'optique — Optique ophtalmique — Gabarits

Reference number
ISO 11380:1994(E)

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.

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.

International Standard ISO 11380 was prepared by Technical Committee ISO/TC 172, *Optics and optical instruments*, Subcommittee SC 8, *Ophthalmic optics*.

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Optics and optical instruments — Ophthalmic optics — Formers

1 Scope

This International Standard specifies the characteristics of formers which are used in edging machines to edge lenses designed for insertion into spectacle frames.

It is not applicable to separate formers required for supplementary treatment of lenses, for example facetting.

2 Types of former

Lens formers shall be classed by lens size (see 2.1) or aperture size (see 2.2).

Material and thickness which are dimensionally stable shall be selected.

2.1 Lens size

Lens size formers are formers which are of the same size and shape as the spectacle lenses to be produced.

They may be furnished so as to provide a former for each size in the range of a particular frame style (system a), or may be furnished in one particular size intended for use with a specified range of sizes (both larger and smaller) (system b).

2.2 Aperture size

Aperture size formers are formers which are of the same shape as the spectacle lenses to be produced, but which are smaller than the finished lens size by an amount equivalent to a nominal bevel. They shall be capable of being fitted firmly, by hand, into the aperture of the specified frame size without altering the size or shape of the rim, as designed, and without gaps between the rim and the former being discernable with normally corrected vision.

3 Dimensional requirements

All dimensions and tolerances given in figure 1 shall apply.

The dimensional difference between two formers of the same nominal size and shape shall not at any corresponding point, on the circumference, exceed 0,2 mm.

NOTE 1 The standardized system of holes is based on the systems used worldwide, as shown in figure 2.

The system shown in figure 2 a) is considered the most suitable for future development.

4 Marking

Formers shall be marked with at least the following information:

a) manufacturer's or supplier's identification;

b) model identification;

c) letter "N" in combination with a boxing symbol to indicate the nasal side of the formers.

Formers of the type specified in 2.1 shall in addition be marked with the horizontal boxed lens size, in millimetres.

Formers of the type specified in 2.2 shall in addition be marked with the horizontal boxed lens size, in millimetres, that it it is intended to reproduce, and shall also carry the words "aperture size".

The indication of the centreline and of the vertical axis with short marks on one or on both sides of the formers is optional. However, if marks are applied they shall not vary more than ± 1° from the nominal direction. See figure 3.

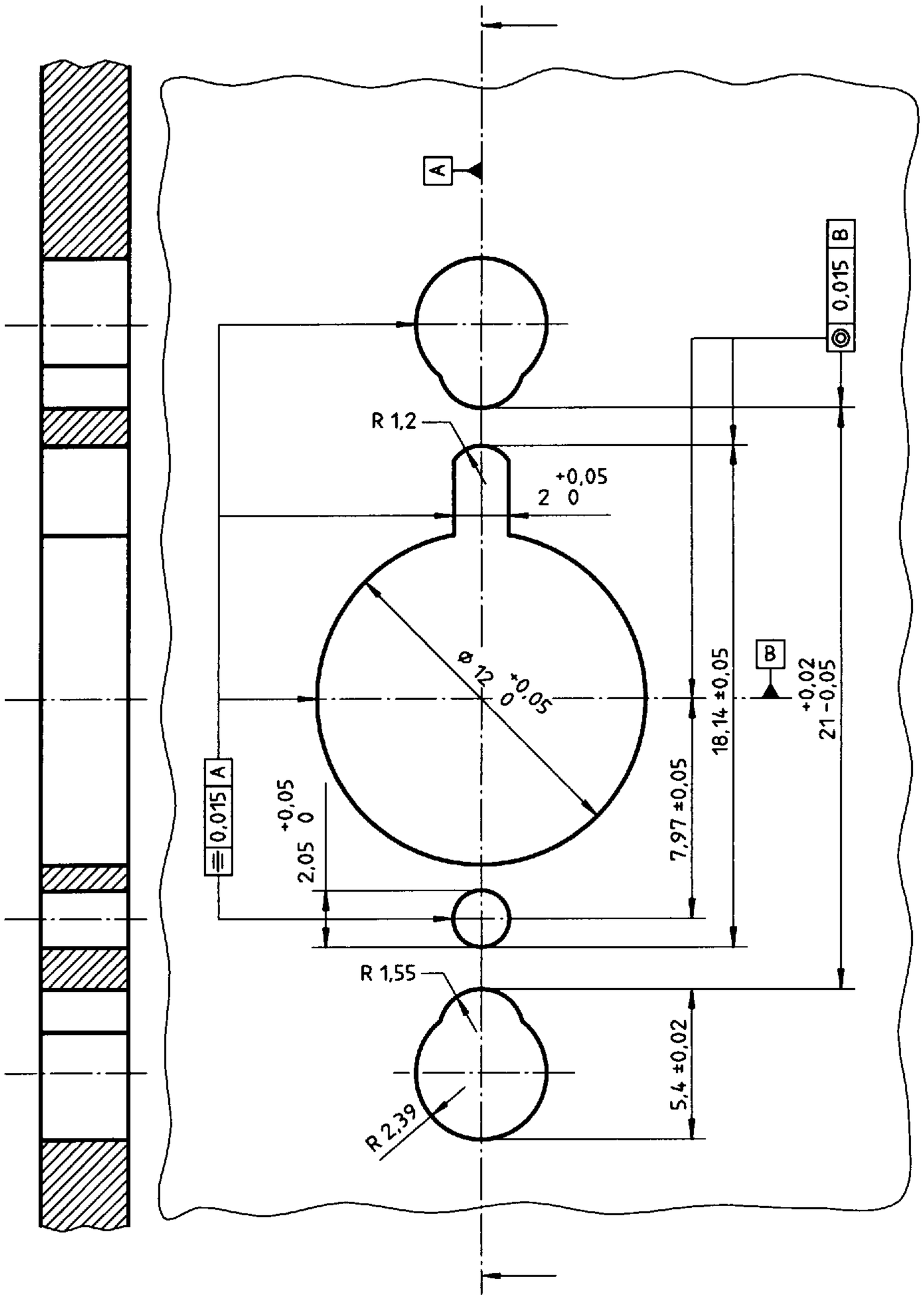

Figure 1 — Dimensions and tolerances

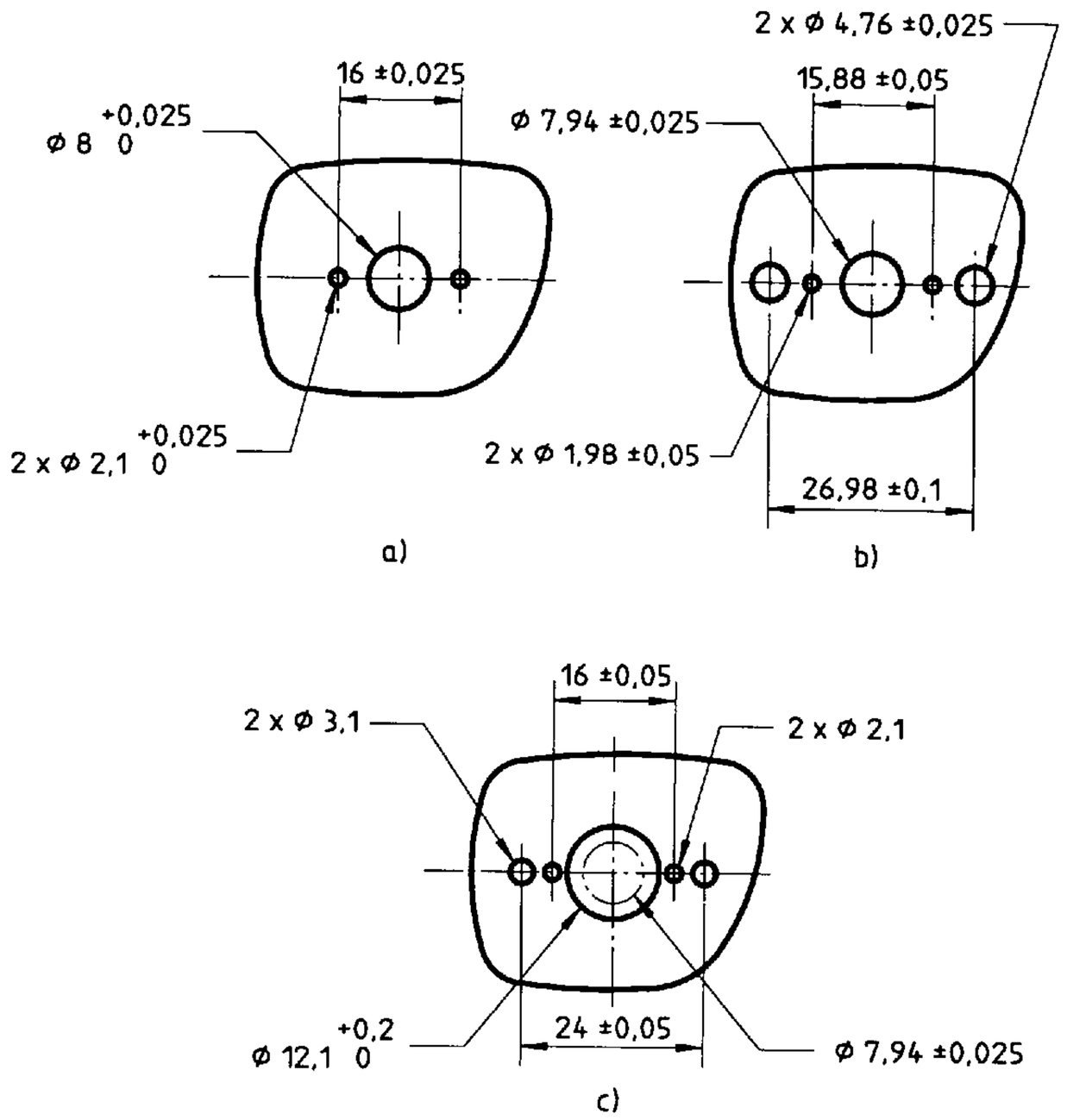

Figure 2 — Standardized system of holes

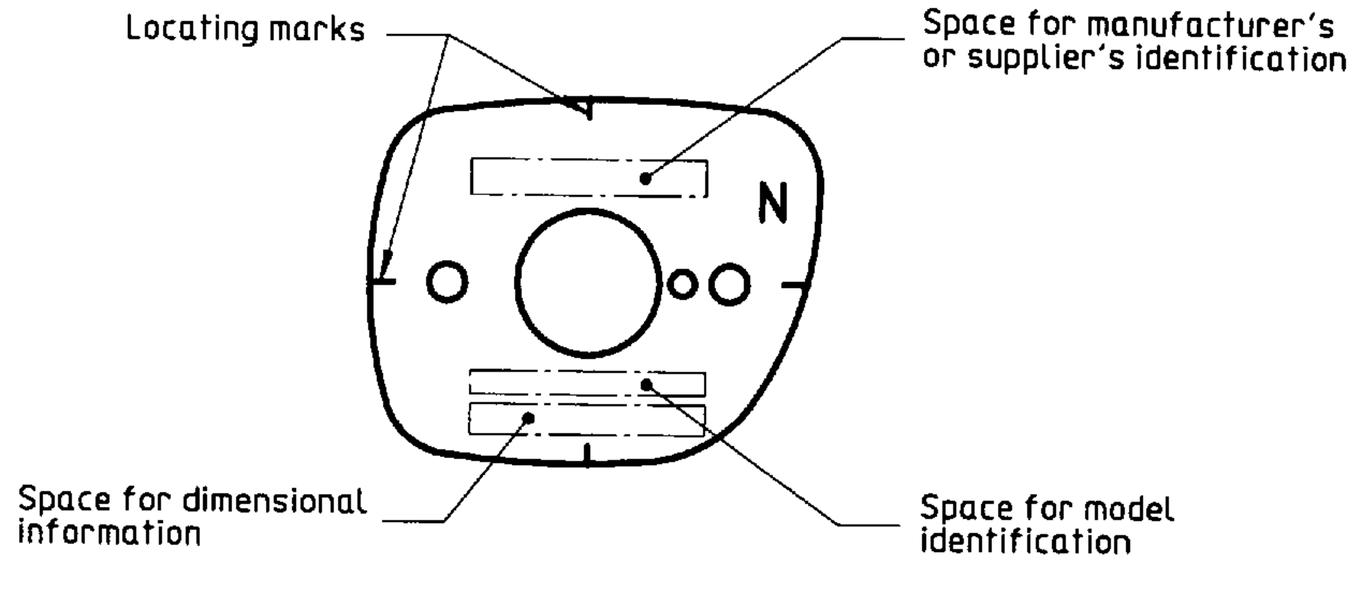

Figure 3 — Preferred locations of markings

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Descriptors: optical equipment, ophthalmic optics, eyeglasses, corrective lenses, patterns, specifications, dimensions, marking.

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