

This is a preview of "ISO 1073-2:1976". [Click here to purchase the full version from the ANSI store.](#)

INTERNATIONAL STANDARD 1073 / II

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Alphanumeric character sets for optical recognition — Part II : Character set OCR-B — Shapes and dimensions of the printed image

*Jeux alphanumériques de caractères pour la reconnaissance optique —
Partie II : Jeu de caractères ROC-B — Formes et cotes de l'image imprimée*

First edition — 1976-12-01

Corrected and reprinted — 1979-06-15

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 1073/II was drawn up by Technical Committee ISO/TC 97, *Computers and information processing*, and was circulated to the Member Bodies in May 1975.

It has been approved by the Member Bodies of the following countries :

Australia	Hungary	Sweden
Belgium	Italy	Switzerland
Brazil	Japan	Turkey
Czechoslovakia	Netherlands	United Kingdom
Denmark	New Zealand	U.S.A.
France	Romania	U.S.S.R.
Germany	South Africa, Rep. of	Yugoslavia

No Member Body expressed disapproval of the document.

This International Standard, together with ISO 1073/I, cancels and replaces ISO Recommendation R 1073-1969.

Alphanumeric character sets for optical recognition — Part II : Character set OCR-B — Shapes and dimensions of the printed image

1 GENERAL

1.1 Scope

This International Standard for character shapes and sizes is intended to facilitate and foster the use of Optical Character Recognition (OCR) in data processing, by defining character shapes suitable for both human and machine reading.

It establishes a common basis for printing equipment and optical scanning equipment for OCR interchange applications.

Additional International Standards will cover the print quality and the relevant characteristics of the formats needed to satisfy interchange requirements.

1.2 Field of application

This International Standard specifies the printed image shapes and sizes of alphanumeric characters, graphics and symbols designed for use in Optical Character Recognition. They are also suitable for general purposes.

In order to satisfy present requirements and encourage the wide extension of OCR applications, two sets of characters are specified. These are named OCR-A and OCR-B.

Character set OCR-A includes the numeric sub-set which was recommended in draft ISO Recommendation No. 890 (now part of this International Standard). The shapes of the characters have been designed to be suitable for use in many applications of OCR. Dimensions of OCR-A are given in three sizes. (See part I.)

The shapes of the OCR-B characters have been designed for use in OCR systems without undue sacrifice of their suitability for general purposes in a wide range of applications. Dimensions of OCR-B are given in three sizes.

1.3 Definitions

For the purpose of this International Standard the following definitions apply :

1.3.1. OCR-A : A repertoire of 69 characters of which 56 are graphics included in the ISO 7-bit coded character set (ISO 646-1973). It comprises digits, capital letters, capital national letters and other graphics. (See part I.)

1.3.2 OCR-B : A repertoire of 121 characters comprising

digits, capital and small letters, all the graphics specified in the ISO 7-bit coded character set (ISO 646-1973), national letters, diacritical signs and further graphics.

NOTES

1 For applications which involve circulation of documents across boundaries between areas in which different national characters are in use, agreement between the sender and the recipient of the documents is required.

2 The metric and inch dimensions in this International Standard are rounded and therefore consistent but not exactly equal. Either system may be used but the two should not be intermixed.

3 It is recognized that some type-making and printing processes will not be able to produce sharp corners. Corners not specified as having a specific radius should be as sharp as practicable. However, it is not necessary for OCR purposes that the radii of the corners of the nominal printed image be less than 0,08 mm (0.003 5 in).

2 STYLES

The OCR-B font (see clause 13) comprises 121 characters, but, in general, only a subset will be used for a specific application.

The character shapes and dimensions are specified by reference drawings on a reference grid. The nominal strokewidth is constant for each character of the standard set entitled "constant-strokewidth font"; the centreline of each character is indicated on the reference grid.

A second style of characters entitled "letterpress font" may be used with printing equipment which can reproduce fine details with sufficient accuracy. For many classes of printers, however, the strokewidth is less controllable and therefore for these printers the constant-strokewidth font shall be used.

For aesthetic reasons, the strokewidth of the letterpress font characters is varied deliberately and the stroke endings are specially designed. But the centrelines are the same for both fonts and these centrelines, as defined for the constant-strokewidth font, are the definitive part of this standard.

3 OCR-B SIZES

3.1 Three sizes are specified for OCR-B characters in order to provide for use with a wide range of printing equipment processing differing print quality characteristics. Devices such as typewriters, cash registers, numbering machines, high-speed printers, and credit card imprinters, besides printing processes such as letterpress and offset lithography, are all suitable.