

This is a preview of "ISO 1004-1:2013". [Click here to purchase the full version from the ANSI store.](#)

First edition
2013-06-01

Information processing — Magnetic ink character recognition —

Part 1: Print specifications for E13B

*Traitement de l'information — Reconnaissance des caractères à
encre magnétique —*

Partie 1: Spécifications d'impression E13B



Reference number
ISO 1004-1:2013(E)

© ISO 2013



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 1004-1:2013". Click here to purchase the full version from the ANSI store.

Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Character configuration	1
2.1 Designation.....	1
2.2 Dimensions.....	2
3 Character spacing and alignment	2
3.1 Spacing.....	2
3.2 Alignment.....	2
4 Character skew	2
5 Character tolerances	3
5.1 Dimensions.....	3
5.2 Average edge definition.....	3
5.3 Average edge tolerance.....	3
5.4 Edge irregularity tolerance.....	3
5.5 Extraneous ink — attached.....	12
5.6 Minimum width of horizontal bars.....	13
6 Voids	13
6.1 Maximum allowable single voids.....	13
6.2 Maximum allowable combined voids.....	13
7 Uniformity of ink distribution	13
8 Extraneous ink	15
8.1 Magnetic.....	15
8.2 Nonmagnetic.....	15
8.3 Extraneous ink front.....	17
8.4 Extraneous magnetic ink back.....	17
9 Debossment	17
10 Embossment	17
11 Signal level	18
11.1 Definition of signal level.....	18
11.2 Nominal signal level.....	18
11.3 Relative signal level.....	18
12 Paper	19
13 Format	19
13.1 Reference edges.....	19
13.2 Clear band (MICR).....	33
13.3 Optical clear band.....	33
14 Optical clear band background	34
14.1 General.....	34
14.2 Background reflectance.....	34
14.3 Print contrast signal (PCS) — Magnetic ink printed character.....	34
14.4 Print contrast signal (PCS) — Within the background.....	34
15 Permanence of MICR printing	34
15.1 Permanence specification.....	34
Annex A (informative) Debossment of E-13B font	35
Annex B (informative) MICR Document Sampling References	36

This is a preview of "ISO 1004-1:2013". [Click here to purchase the full version from the ANSI store.](#)

Annex C (informative) Paper Characteristics for MICR	37
Annex D (informative) Unit conversion tables	43
Bibliography	45

This is a preview of "ISO 1004-1:2013". [Click here to purchase the full version from the ANSI store.](#)

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. 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. 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.

The committee responsible for this document is ISO/TC 68, *Financial services*, Subcommittee SC 7, *Core banking*.

This first edition of ISO 1004-1, together with ISO 1004-2, cancels and replaces ISO 1004:1995, which has been technically revised.

ISO 1004 consists of the following parts, under the general title *Information processing — Magnetic ink character recognition*:

- *Part 1: Print specifications for E13B*
- *Part 2: Print specifications for CMC7*

[Annexes A](#) to [D](#) of this International Standard are for information only.

This is a preview of "ISO 1004-1:2013". [Click here to purchase the full version from the ANSI store.](#)

Introduction

The characters specified in this part of ISO 1004 were developed initially for use in banks to permit automatic document handling for financial institution data processing, but they have application to other automatic handling systems as well.