(Revision of ANSI Z39.32-1981)

Information on Microfiche Headers

ISSN: 1041-5653

Abstract: This standard provides a set of minimal specifications for eye-legible information to be included in the header area of microfiche. The header is that area reserved for identification of the information on the microfiche. These minimal specifications include the following bibliographic elements: location, order of elements in each location, size of type, and contrast between characters and background. The standard recommends additional categories of information when they apply and space permits.

An American National Standard
Developed by the
National Information Standards Organization
Approved December 19, 1995 by the
American National Standards Institute



Published by **NISO Press** 4733 Bethesda Avenue Suite 300 Bethesda, MD 20814

Copyright ©1996 by the National Information Standards Organization

All rights reserved under International and Pan-American Copyright Conventions. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage or retrieval system, without prior permission in writing from the publisher. All inquiries should be addressed to NISO Press, 4733 Bethesda Avenue, Suite 300, Bethesda, MD 20814.

Printed in the United States of America

ISSN: 1041-5653 National Information Standards series

ISBN: 1-880124-25-4



This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

Library of Congress Cataloging-in-Publication Data

National Information Standards Organization (U.S.)

Information on microfiche headers / developed by the National Information Standards Organization.

p. cm. — (National information standards series, ISSN 1041-5653)

 $"Approved \, December \, 19,1995 \,\, by \, the \, American \, National \, Standards \, Institute."$ Replaces standard Z39.32-1981.

"ANSI/NISO Z39.32-1996."

ISBN 1-880124-25-4

1. Microfiches—Format—Standards—United States. 2. Microfiches—Labeling—Standards—United States. 3. Layout (Printing)—Standards—United States. I. American National Standards Institute. II. Title. III. Series.

TR835.N26 1996a 96-15295 CIP

070.5'795—dc20

Contents

Fo	reword	. V
1.	Scope	1
2.	Purpose	1
3.	References	1
4.	Definitions	1
5.	General Statements	
	5.1 Polarity	1
	5.2 Type Size	
	5.3 Romanization	
	5.4 Numbers	∠
,	Content and Arrangement of Header Areas	2
ь.	6.1 General	∠
	6.1 General	
	6.3 Document Description Area (Central Area)	2
	6.3 Document Description Area (Central Area)	
	6.3.1.1 Sequence	.2
	6.3.1.2 Title	2
	6.3.1.3 Edition Information	3
	6.3.1.4 Author	3
	6.3.1.4.1 Author's Name	3
	6.3.1.4.2 Corporate Author	3
	6.3.1.5 Place of Publication	3
	6.3.1.6 Publisher or Corporate Source	3
	6.3.1.7 Date of Publication	3
	6.3.1.8 Series	3
	6.3.1.9 Microfiche Publication Data	3
	6.3.1.9.1 Collection Title of Fiche	3
	6.3.1.9.2 Microfiche Series	3
	6.3.1.10 International Standard Book Number (ISBN)	3
	6.3.1.11 Copyright or Security Classification	4
	6.3.2 Periodicals and Other Serials	4
	6.3.2.1 Sequence	4
	6.3.2.2 Title	4
	6.3.2.3 Subsection Titles	4
	6.3.2.4 Author	4
	6.3.2.5 Edition Information	4
	6.3.2.6 Date of Document, Volume Numbering, etc.	4
	6.3.2.7 Place of Publication	
	6.3.2.8 Series	
	6.3.2.9 Microfiche Publication Data	4 1
	6.3.2.9.1 Collection Title of Fiche	4 /\
	6.3.2.9.2 Microfiche Series	4
	6.3.2.1() International Standard Serial Number (ISSN)	C

(Contents continued)	
6.4 Sequential Information Area (Right Area)	5
6.4.1 Numbering	5
6.4.2 Reduction Ratio	5
6.4.3 Distribution Code	5
6.5 Publisher's Company or Product Logo or Identification	5
Appendix: Examples of Application of This Standard	7
A.1 General Arrangement of Header Areas	7
A.2 Monographs	7
A.3 Serials	7
Figure A 1: Areas and dimensions of a microfiche header	7

Foreword

(This foreword is not part of the American National Standard for Information on Microfiche Headers, ANSI/NISO Z39.32-1996. It is included for information only.)

In common with other microforms, microfiche require enlarging devices, such as readers, to make the information they contain available for use. An advantage of the microfiche format is its ability to provide in a header easily accessible information that does not require enlargement for the purpose of simple identification and retrieval.

The purpose of this standard is to provide micropublishers and other microfiche producers, as well as users, with a set of specifications for presenting eye-legible information in headers. This standard requires that headers contain only the few categories of information (or elements) necessary for conclusive identification and filing of microfiche in common use in libraries in the United States and it recommends additional categories of information that may be given when they apply and space permits. Because complete bibliographic data often cannot be given in the limited space available in a header, these recommendations are intended to be applied primarily to facilitate identification and filing.

In promoting uniformity, legibility, and clarity, the standard specifies the location of elements in headers, the order of elements in each location, the minimum type size, and the degree of contrast between characters and background. These requirements are necessarily minimal because the characteristics of uniformity, legibility, and clarity are subjective ones; thus, the requirements should be applied as appropriate to each situation in accordance with common sense. The examples given in the standard illustrate the application of elements in differing circumstances, with variations of practice that are both anticipated and permissible.

The standard has three formal limitations:

- 1. It is limited to microfiche that conform to the American Standard for Microfiche, ANSI/AIIM MS5-1992.
- 2. It applies only to the kind of monographic and serial materials that are commonly produced on microfiche (whether as original or reprinted publications) and that are intended for library use (including, but not limited to, books, journals, series, pamphlets, theses, report literature, public documents, and newspapers). It does not, therefore, apply to miscellaneous collections of specialized nonmonographic or nonserial materials such as

sheet music, pictures, promotional flyers, engineering drawings, parts catalogs, business records, and maps.

3. It is limited to eye-legible information in the header area of microfiche, as specified in ANSI/ AIIM MS5-1992. (The header is the area that constitutes the top of a microfiche.) It should be noted that there is a general agreement that microfiche intended for library use benefit greatly from the use of bibliographic tools for organization and retrieval such as indexes, bibliographies, catalogs, and similar finding aids, published in full-size hard-copy or electronic formats. These finding aids are most useful when they are parts of an organization and retrieval system for microfiche that includes divider cards with index tabbing, eye-legible information frames within the image areas of microfiche, and the microfiche headers themselves. For these reasons, both the information suggested and the information required for microfiche headers in this standard should be coordinated with information that appears elsewhere in the organization and retrieval system of which the microfiche are a part; and the information provided for organization and retrieval within the system as a whole should be as complete as possible.

Additionally, the standard is intended to apply to computer-output microfiche of monographic or serial materials that are intended for library use and that meet the dimensional requirements of ANSI/AIIM MS5-1992, despite current difficulties in meeting the standard's polarity requirements. In addition, the standard may be used as a guide in preparing headers for other computer-output microfiche when its provisions are appropriate and to the extent space permits. Indeed, relevant provisions of the standard may be used in preparing headers for any microfiche, even those to which the standard does not directly apply.

Because small variations in the use of punctuation do not seriously hinder the identification and filing of microfiche, only 6.3.1.4 and 6.3.2.4 require the use of specific punctuation. The ISBD (G): General International Standard Bibliographic Description, Revised Edition (1992, New York and Munich: K.G. Saur) is recommended as a guide for header punctuation. (continued)

FOREWORD ANSI/NISO Z39.32-1996

The text of the 1981 standard has been retained; the revised text contains only minor additions and revisions. It includes a specific area for a publisher's company or product logo or identification; advances the citation of both the title of the fiche collection and the title of the work on the fiche; and makes editorial changes. It also includes definitions for polarity, collection, and series. Definitions for collection and series are from Anglo-American Cataloguing Rules, Revised Second Edition (1988). The list of references has been updated, and the word "heading(s)" has been changed to "header(s)" throughout the standard.

NISO acknowledges with thanks and appreciation Harriet Rebuldela, Head, Acquisitions Department, and Tim Byrne, Head, Government Publications at the University of Colorado Library for their contributions in revising this standard.

This standard was processed and approved for submittal to ANSI by the National Information Standards Organization. It was balloted by the NISO Voting Members April 1, 1995 - July 7, 1995. It will next be reviewed in 2000. Suggestions for improving this standard are welcome. They should be sent to the National Information Standards Organization, 4733 Bethesda Avenue, Suite 300, Bethesda, MD 20814. NISO approval of this standard does not necessarily imply that all Voting Members voted for its approval. At the time it approved this standard, NISO had the following Voting Members:

NISO Voting Members

American Association of Law Libraries
Andrew Laurence

American Chemical Society Robert S. Tannehill, Jr.

Leon R. Blauvelt (Alt)

American Library Association Myron B. Chace Glenn Patton (Alt)

American Society for Information Science Mark H. Needleman

American Society of Indexers

Patricia S. Kuhr Marie Kascus (Alt)

American Theological Library Association Myron B. Chace

Apple Computer, Inc. Janet Vratney Rita Brennan (Alt)

Art Libraries Society of North America Julie Mellby

Penney DePas (Alt)

Association for Information and Dissemination Centers Bruce H. Kiesel

Association for Information and Image Management Judy Kilpatrick

Association of Jewish Libraries Bella Hass Weinberg Pearl Berger (Alt)

Association of Research Libraries Duane E. Webster

AT&T Bell Labs M.E. Brennan

Book Manufacturers' Institute Stephen P. Snyder

CARL Corporation Ward Shaw

College Center for Library Automation J. Richard Madaus Ann Armbrister (Alt) Data Research Associates, Inc. Michael J. Mellinger James Michael (Alt)

EBSCO Information Services Sandra H. Hurd Mary Beth Vanderpoorten (Alt)

The Faxon Company Fritz Schwartz

Gaylord Information Systems Robert Riley Bradley McLean (Alt)

Geac Computers, Inc. John Blackham Simon Kendall (Alt)

Indiana Cooperative Library Services Authority Barbara Evans Markuson Janice Cox (Alt)

Innovative Interfaces Gerald M. Kline Sandra Westall (Alt)

Knight-Ridder Information, Inc. Richard Boulderstone David Loy (Alt)

Lexis/Nexis Peter Ryall

Library Binding Institute Sally Grauer

Library of Congress Winston Tabb Sally H. McCallum (Alt)

Medical Library Association Katherine Hughes Carla J. Funk (Alt)

MINITEX

Anita Anker Branin William DeJohn (Alt)

Music Library Association Lenore Coral Geraldine Ostrove (Alt) ANSI/NISO Z39.32-1996 FOREWORD

National Agricultural Library Pamela Q. J. Andre

Gary K. McCone (Alt)

National Archives and Records Administration

Alan Calmes

National Federation of Abstracting and Information

Services

John Schnepp

National Library of Medicine

Lois Ann Colaianni

OCLC, Inc.

Don Muccino

OHIONET

Michael P. Butler Greg Pronevitz (Alt)

PALINET

James E. Rush

P.S.S. Tapestry

Mary Sue Iddings
Janet Pingitore (Alt)

Readmore Academic Services

Sandra J. Gurshman Dan Tonkery (Alt)

The Research Libraries Group, Inc.

Wayne Davison Kathy Bales (Alt)

R. R. Bowker - U.S. ISBN Maintenance Agency

Emery Koltay

Society of American Archivists

Lynn Lady Bellardo

Society for Technical Communication

Jeff Hibbard Kevin Burns (Alt) Special Libraries Association

Marjorie Hlava

SUNY/OCLC Network

Glyn T. Evans

David Forsythe (Alt)

U.S. Department of the Army, Headquarters

Louise Nyce

U.S. Department of Commerce, National Institute of Stan-

dards and Technology, Office of Information Services

Jeff Harrison

Marietta Nelson (Alt)

U.S. Department of Defense, Defense Technical Information

Center

Gretchen A. Schlag Claire Tozier (Alt)

U.S. Department of Defense, Joint Medical Library

Diane Zehnpfennig Beth Knapke (Alt)

U.S. Department of Energy, Office of Scientific and Technical

Information

Mary Hall

Nancy Hardin (Alt)

U.S. National Commission on Libraries and Information

Science

Peter R. Young

VTLS, Inc.

Vinod Chachra

West Publishing

Andy Desmond Forrest Rhodes (Alt)

H.W. Wilson Company

George I. Lewicky

Ann Case (Alt)

NISO Board of Directors

At the time NISO approved this standard, the following individuals served on its Board of Directors:

Michael J. Mellinger, Chairperson Data Research Associates, Inc.

Michael J. McGill, Vice Chair/Chair-elect University of Michigan Medical Center

James E. Rush, Immediate Past Chairperson PALINET

Joel H. Baron, Treasurer The Faxon Company

Patricia R. Harris, Executive Director

National Information Standards Organization

Directors Representing Libraries

Nolan F. Pope

University of Wisconsin - Madison

Clifford Lynch

University of California

Lennie Stovel

Research Libraries Group, Inc.

Directors Representing Information Services

Rebecca Lenzini

CARL Corporation

John Kolman

Ameritech Library Services

Vinod Chachra

VTLS, Inc.

Directors Representing Publishing

Marjorie Hlava

Access Innovations, Inc.

Bob Badger

Springer-Verlag, NY

Elizabeth Bole Eddison

Inmagic, Inc.

Information on Microfiche Headers

1. Scope

This standard concerns the composition of the information to be provided in the header areas of microfiche that conform to the dimensional requirements of ANSI/AIIMMS5-1992 American National Standard for Microfiche, and that are produced for distribution to libraries and information centers. It applies to original micropublications as well as microfiche reprints of monographs and serials.

2. Purpose

The purpose of this standard is to specify the elements necessary or desirable for basic identification and retrieval of microfiche.

3. References

This standard is to be used in conjunction with the following American National Standards:

ANSI/AIIM MS5-1992, Microfiche.

ANSI/NISO Z39.5-1985, Abbreviation of Titles of Publications.

ANSI/NISO Z39.9-1992, International Standard Serial Numbering (ISSN).

ISO 2108, International Standard Book Numbering (ISBN).

ANSI/NISO Z39.23-1990, Standard Technical Report Number (STRN) Format and Creation.

4. Definitions

Collection—1. Three or more independent works or parts of works by one author published together.

2. Two or more independent works or parts of works by more than one author published together and not written for the same occasion or for the publication in hand.

Document—Any published (including micropublished) or manuscript work. A document may be a book, pamphlet, periodical, newspaper, report, thesis, patent, or any other textual or graphic work. Not included are (a) data stored on magnetic tape, (b) electronic display materials such as videotape or videodisk, (c) audio recordings, and (d) filmstrips, motion picture films, slides, or other recorded visual materials that are enlarged for use.

Element—A word, phrase, or group of characters

or numbers representing a distinct component of the bibliographic information that identifies a given document.

Microfiche header—The area above the image area of each microfiche that is reserved for identification of the information on the microfiche. It is readable without magnification. (See ANSI/AIIMMS5-1992.)

Monograph—A nonserial document either complete in one bibliographically independent volume or published in a number of volumes under the same title.

Polarity—The tonal relationship between the original film or paper format and the copy made from it. A negative polarity is one in which the tonal values are reversed from the original with white appearing as black and black appearing as white. A positive polarity is one in which the tonal values are the same as the originals with white appearing as white and black appearing as black.

Serial—A document issued in successive parts usually bearing sequential, numerical, or chronological designations and intended to be continued indefinitely. Serials include periodicals, newspapers, annuals (reports, yearbooks, etc.), and the journals, memoirs, series of reports, transactions, proceedings, etc., of institutions and societies.

Series—1. A group of separate items related to one another by the fact that each item bears, in addition to its own title proper, a collective title applying to the group as a whole. The individual items may or may not be numbered. 2. Each of two or more volumes of essays, lectures, articles, or other writings, similar in character and issued in sequence (e.g., Lowell's *Among my books*, second series). 3. A separately numbered sequence of volumes within a series or serial (e.g., *Notes and queries*, 1st series, 2nd series, etc.).

5. General Statements

5.1 Polarity

Polarity of the information in the header area should, where possible, be positive; that is, dark characters on a light background. Note: Positive headers may

not always be practical, as, for example, where primary distribution microfiche having positive headers are used to produce secondary copies which would have negative headers. Nonetheless, since header information is more readable in positive polarity, negative headers shall not be used where they can be avoided.

5.2 Type Size

All header area information shall be readable without magnification and shall read from left to right when the microfiche is held so that the header is at the top. No character shall be less than 1.5 mm high.

5.3 Romanization

For documents in non-roman scripts, the header information shall be romanized in accordance with the ALA-LC Romanization Tables and placed in brackets. The title in the original script may be added to the romanized form.

5.4 Numbers

Numbers shall be given in arabic notation, with the exception of roman numerals appearing as part of a title or denoting contents of a microfiche.

Example:

THE PEALE FAMILY PAPERS, Series VIII-A.

6. Content and Arrangement of Header Areas

6.1 General

The microfiche header is composed of three distinct areas, each of variable width, situated between two side margins (see ANSI/AIIMMS5-1992). The minimum widths of these areas shall be measured from the border of the left margin and shall be as specified below; latitude is allowed to meet differing requirements (see Appendix).

- Left area: Identification (for example, alphanumeric filing) area
 Minimum width: 30 mm
- 2. Central area: Document description area Minimum width: 60 mm
- Right area: Sequential information area Minimum width: 15 mm

Empty space at least 2 mm wide and preferably 5 mm wide should be provided between one area and the next.

6.2 Identification Area (Left Area)

The top part of the area, not less than 5 mm in height, should be left blank for identification information that libraries and information centers may wish to add to the header. Identification letters and numbers and information concerning any restrictions of use of the document, such as copyright or security classification, may be placed in the bottom part of the area when the microfiche is made. Alternatively, information concerning copyright or security restrictions may be given at the bottom of the central area when the fiche is made. Identification letters and numbers should be given before information concerning restrictions. When the space available is too small for both to be given in the left area, some or all of the information concerning restrictions may continue into the lower part of the document description area of the header (see Appendix).

6.3 Document Description Area (Central Area)

This area shall be used for bibliographic information briefly describing the document.

6.3.1 Monographic Publication

6.3.1.1 Sequence

The sequence of essential and optional elements used shall be as listed below.

6.3.1.2 Title

The title of the document shall be given. It should appear as it is given in the document, except when romanization (see 5.3) or abbreviation is required. The title may be truncated whenever it is necessary to accommodate other essential bibliographic elements. The title should be printed in capital letters or otherwise emphasized typographically, except where the meaning would be changed. A translation of the title may be added within brackets.

Examples:

SEIN UND ZEIT GELASSENHEIT [Discourse on thinking].

Exception: When an element other than the title is normally employed as the primary means of document description, such as the report number of a technical report, that element may precede the title.

Example:

EPA/600/3-76/36 EFFECTS OF CHLORINE AND SULFITE REDUCTION ON LAKE MICHIGAN INVERTEBRATES.

6.3.1.3 Edition Information

If edition information appears in the document, it should be given after the title.

Example:

GUIDE TO MICROREPRODUCTION EQUIP-MENT, 4th ed.

6.3.1.4 Author

The author(s) of the document should be identified. If the bibliographic information is given in paragraph form, the name(s) of the author(s), compiler(s), or editor(s), if used, shall be preceded by a slash (/). Otherwise, no punctuation is required.

Examples:

MICROFILM TECHNOLOGY / Carl E. Nelson MICROFILM TECHNOLOGY

Carl E. Nelson

6.3.1.4.1 Author's Name

The name of a personal author(s) shall be given as it appears in the document, except when romanization is necessary. However, to conserve space initials may be substituted for the full first and middle names. If there is more than one author, at least the first named shall be given. Omissions shall be indicated by [and others] or et al.

Examples:

THESIS HANDLING IN UNIVERSITY LIBRARIES / Kelly Patterson [and others]

THESIS HANDLING IN UNIVERSITY LIBRARIES

Kelly Patterson et al.

DEVELOPMENTS IN COPYING, MICROGRAPHICS,... 1976. P. A. Napier.

6.3.1.4.2 Corporate Author

If no personal author is known and the document is not anonymous, the corporate body responsible for the intellectual content of the document shall be given. If desired, both personal and corporate authors may be given.

6.3.1.5 Place of Publication

The place of publication of the document may be given.

6.3.1.6 Publisher or Corporate Source

The publisher or corporate source of the document may be given.

6.3.1.7 Date of Publication

The date of publication of the document shall be given if known.

6.3.1.8 Series

The series title and number (if applicable) may be given. The subseries title and number (if applicable) may also be given. If they are given, both shall be placed in parentheses.

Example:

(University of California publications in linguistics; 29)

6.3.1.9 Microfiche Publication Data

The place of publication, the publisher or distributor, and the date of filming of the microfiche may be given here or, preferably, in the microimage area.

6.3.1.9.1 Collection Title of Fiche

The collection title of the work on the fiche should be given. The collection title may be truncated to the first four meaningful words of the title whenever it is necessary to accommodate other essential bibliographic elements.

Example:

MEMOIRS OF A SLAVE GIRL / H.B. Jacobs. --Boston: Pub. for the author, 1861. (ANTI-SLAVERY PROPAGANDA IN THE OBERLIN COLLEGE...)

6.3.1.9.2 Microfiche Series

The series title and number shall be given.

Example:

ASP microfiche 1.46.1

6.3.1.10 International Standard Book Number (ISBN)

The ISBN, if available, may be given in this area, rather than in the identification area (6.2) or the sequential information area (6.4).

6.3.1.11 Copyright or Security Classification

Information concerning copyright or security restrictions may be given at the bottom of the central area (see 6.2).

6.3.2 Periodicals and Other Serials

6.3.2.1 Sequence

The sequence of the bibliographic elements used shall be as listed below. The elements may be given in paragraph form.

6.3.2.2 Title

The title of the document shall be given. It shall appear as it is shown on the title page, except when romanization (see 5.3) or abbreviation is required. The title may be abbreviated whenever it is necessary to accommodate other essential bibliographic elements; the abbreviations should conform to ANSI/NISO Z39.5-1985. If the document has no title page, the title shall be taken from the cover, caption, masthead, or editorial page in that order. The title should be printed in capital letters or otherwise typographically emphasized, except when the meaning would be changed. A translation of the title may be added in brackets.

6.3.2.3 Subsection Titles

In the case of serials published in more than one series, section, or subsection, the bibliographic elements that appear in the document shall appear in the header in the following order: title of parent serial, designation of section, title of section, designation of subsection, title of subsection. The organization responsible for the document shall be given if it is needed to identify the publication.

Examples:

CURRENT CONTENTS. SPACE AND PHYSICAL SCIENCES.

JOURNAL OF RESEARCH. Section C. ENGINEERING AND INSTRUMENTATION.

6.3.2.4 Author

The name of the organization responsible for the document may be given. If given in paragraph form and appearing on the same line of text as the title, the name of the organization shall be preceded by a slash (/); otherwise, no punctuation is required.

Example:

ABSTRACT BULLETIN / Institute of Paper Chemistry.

6.3.2.5 Edition Information

If a serial is issued in different editions that have the same title proper but that contain differences in all or part of the text, the serial's edition statement shall be given.

6.3.2.6 Date of Document, Volume Numbering, etc.

Issue identification, such as the date of the document and the volume and issue number, shall be given here or in the sequential information area (see 6.4 and Appendix A.3). The pages included on a microfiche may also be given if the item is not complete on one fiche.

Example:

1974 November vol. 11, no. 11 p. 83-126 END

6.3.2.7 Place of Publication

The place of publication and the publisher of the document may be given.

6.3.2.8 Series

If applicable, the series title and number may be given. The subseries title and number (if applicable) may be given. If they are given, both shall be placed in parentheses.

6.3.2.9 Microfiche Publication Data

The place of publication, the publisher or distributor, and the date of filming of the microfiche may be given here or, preferably, in the microimage area.

6.3.2.9.1 Collection Title of Fiche

Collection title of periodicals or other serials on the fiche should be given. The collection title may be truncated to the first four meaningful words in the title whenever it is necessary to accommodate other essential bibliographic elements.

6.3.2.9.2 Microfiche Series

The series title and number (if applicable) shall be given.

6.3.2.10 International Standard Serial Number (ISSN)

The ISSN, if available, may be given in this area, rather than in the identification area (6.2) or the sequential information area (6.4).

6.4 Sequential Information Area (Right Area)

The sequential information area should be used to indicate which part of the document is contained in the microfiche and the position of the microfiche in the set (see also 6.3.2.6).

6.4.1 Numbering

The last microfiche in a set shall be so designated. If the total number of microfiche in a set is known at the time of filming, it shall be so designated on each microfiche.

Examples:

1 of 1. Entire document. 1 of 5, 2 of 5, ..., 5 of 5. 1/5, 2/5, ..., 5/5

Note: Some existing computer microform equipment is incapable of meeting this requirement. In such a case, the last microfiche shall be so identified, eye-legibly, in the microimage area.

If the total number of microfiche in a set cannot be predetermined, a blank, a dash, or, preferably, an arrow may be substituted in place of the last number until filming proceeds to the point (prior to the last microfiche) that the number is known.

Examples:

```
1 of , 2 of ,..., 115 of 115
1/- , 2/- ,..., 5 LAST.
1/→ , 2/→ ,...,5/5
1/→, 2/→ ,...,11/13, 12/13, 13/13.
```

6.4.2 Reduction Ratio

The reduction ratio used in filming or the minimum magnification ratio recommended for reading, or both, may be given.

6.4.3 Distribution Code

Publisher's code or symbol used in the distribution of fiche to subscribers may be placed in the sequential information area (see 6.4).

Example:

G3 (Type of report)
B (Subject code)
16 (Subject category)

6.5 Publisher's Company or Product Logo or Identification

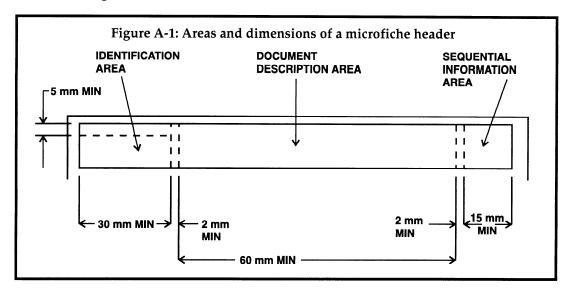
A publisher wishing to include its company or product logo or identification may add another area (see 6.1) and may give it on the extreme right or extreme left area of the header. It shall not exceed 15 mm in width.

ANSI/NISO Z39.32-1996 APPENDIX

Appendix Examples of Application of This Standard

(This appendix is not part of the American National Standard for Information on Microfiche Headers, ANSI/NISO Z39.32-1996. It is included for information only.)

A.1 General Arrangement of Header Areas



A.2. Monographs

(1)	Z681.L34	REPROGRAPHIC SERVICE IN LIBRARIES Charles G. LaHood and Robert C. Sullivan	1of 1
	2001.234	1975	24X
(2)	655.3	COPYING METHODS MANUAL/William R. Hawken Chicago: American Library Association;	1of
	033.3	1966. (LTP Publications; 11)	xv, 1–79
(3)		ELECTRONIC PHASE TRANSITION IN FeS	1/2
	000-1198-893	J. M. D. Coey [and others] 1974	

A.3. Serials

(1)	JOURNAL OF THE AMERICAN CHEMICAL SOCIETY SUPPLEMENTARY MATERIAL 1974 Jan. 9 vol. 96, no. 1 ©1974 American Chemical Society	1of 2
(2)	ELECTRICAL AND ELECTRONICS ABSTRACTS 1973 September; 70 (909) HD38 Abstracts 28665-29606	1of 4

(continued)

APPENDIX ANSI/NISO Z39.32-1996

(3)	RUSSIAN CHEMICAL REVIEWS [Uspekhi khimii] 3/→ 1970 March; vol. 39, no. 3, pp. 169–258	
(4)	SPORTS ILLUSTRATED 2 of 2 1976 December 20–27 vol. 45, no. 25 pp. 95–130 Chicago, Illinois 0038-822X	
(5)	IEEE TRANSACTIONS ON EDUCATION 2 of 2 1970 August vol. E-13, no. 2	
(6)	IEEE TRANSACTIONS ON EDUCATION 1970 August vol. E-13, no. pp. 65–109 E	. 2
(7)	THE GUARDIAN INDEX PART 5: 1963-1972. CARD 2019 SUBJECT CARDS FOR 1965. Abbeys (1) - Africa: South Natives and Racial Policy (21)	/-