

Implementation of
ISO 12222:1996

**Cinematography —
Manufacturer-printed,
latent image
identification
on 16 mm, 35 mm
and 65 mm
motion-picture film —
Specifications and
dimensions**

ICS 37.060.20

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee CPW/36, Cinematography, upon which the following bodies were represented:

- British Kinematograph, Sound and Television Society
- British Photographic Association
- ITV Association (Itva)

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Broadcasting Corporation
- British Film Institute
- Broadcasting Entertainment Cinematograph and Theatre Union

This British Standard, having been prepared under the direction of the Consumer Products and Services Sector Board, was published under the authority of the Standards Board and comes into effect on 15 March 1997

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The following BSI references relate to the work on this standard:
Committee reference CPW/36
Draft for comment 95/540600 DC

ISBN 0 580 26637 0

Amendments issued since publication

Amd. No.	Date	Comments

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National foreword

This British Standard reproduces verbatim ISO 12222:1996 and implements it as the UK national standard.

This British Standard is published under the direction of the Consumer Products and Services Sector Board whose Technical Committee CPW/36 has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international committee any enquiries on interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, page ii, pages 1 to 14 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

INTERNATIONAL STANDARD

**ISO
12222**

First edition
1996-11-15

Cinematography — Manufacturer-printed, latent image identification on 16 mm, 35 mm and 65 mm motion-picture film — Specifications and dimensions

*Cinématographie — Identification d'image latente, imprimée par le
fabricant, sur films cinématographiques 16 mm, 35 mm et 65 mm —
Spécifications et dimensions*



Reference number
ISO 12222:1996(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 12222 was prepared by Technical Committee ISO/TC 36, *Cinematography*.

1 Scope

1.1 This International Standard specifies the position and dimensions of machine-readable identification numbers on 16 mm, 35 mm and 65 mm motion-picture film. These numbers are intended to be a machine-readable version of the latent image key number. This International Standard also specifies the encoding format to be used for these machine-readable numbers, as well as the area scanned and the spectral characteristics of the scanner.

1.2 This International Standard also specifies the position, dimensions and content of human-readable identification (key) numbers for use on 16 mm, 35 mm and 65 mm motion-picture films intended for original photography or intermediate printing which also include the machine-readable key number described in 1.1.

NOTE These numbers normally are exposed onto the film at the time of manufacture.

1.3 This International Standard further specifies an area that may be used for optional manufacturer-specific film-type identification information.

1.4 This International Standard also specifies an area on the film which is not to be exposed by the film manufacturer, thus leaving it available for customer data recording.

1.5 Finally, this International Standard specifies an optional frame line index mark for 35 mm and 65 mm films.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 69:1990, *Cinematography — 16 mm motion-picture and magnetic film — Cutting and perforating dimensions*.

ISO 491:1995, *Cinematography — 35 mm motion-picture film and magnetic film — Cutting and perforating dimensions*.

ISO 3023:1995, *Cinematography — 65 mm and 70 mm unexposed motion-picture film — Cutting and perforating dimensions*.

ANSI/AIM BC4-1995, *Uniform Symbology Specification — Code 128*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1

key number; edge number; footage number

identification number that is printed with ink or exposed onto the film at the time of manufacture

NOTE The numbers are placed at regular intervals, typically every 20 perforations for 16 mm film, 64 perforations for 35 mm film and 80 perforations for 65 mm film. For the purposes of this International Standard, the key numbers are latent-image exposed.

3.2

bar edge

<bar code> that point where the transmittance is halfway between the maximum transmittance of the adjacent space and the minimum transmittance of the adjacent bar

3.3

scan transmittance profile

<bar code> record of the transmittance measured as a function of distance along the entire bar code symbol

3.4

symbol contrast, SC

<bar code> difference between the largest transmittance ($T_{\max}$) and smallest transmittance ($T_{\min}$) in a scan transmittance profile

3.5

minimum edge contrast, $EC_{\min}$

<bar code> minimum difference between a space transmittance (T_s) and the adjoining bar transmittance (T_b)

3.6

modulation, MOD

<bar code> ratio of minimum edge contrast ($EC_{\min}$) to symbol contrast (SC)

4 General format

The general format of the latent-image identification information shall be as shown in Figure 1 for 16 mm film, Figure 2 for 35 mm film, and Figure 3 for 65 mm film.

No latent information shall be placed along the upper edge of the film, as shown in Figure 1, Figure 2 and Figure 3. This area is reserved for data recording at the time of photography.

This identification information is intended to be exposed onto film cut and perforated in accordance with ISO 69, ISO 491 or ISO 3023.