

# INTERNATIONAL STANDARD

**ISO**  
**732**

Third edition  
1991-07-01

---

---

## **Photography — Film dimensions — 120 and 220 sizes**

*Photographie — Dimension des films — Rouleaux de pellicule 120 et 220*



Reference number  
ISO 732:1991(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 732 was prepared by Technical Committee ISO/TC 42, *Photography*.

This third edition cancels and replaces the second edition (ISO 732:1982), which has been technically revised.

Annexes A, B and C of this International Standard are for information only.

© ISO 1991

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

## Introduction

ISO 732:1982 specified the dimensions for 127, 620 and 120 sizes of roll films. Since the issue of that International Standard, the manufacture of cameras accepting 127 and 620 size films has ceased, and these two sizes of roll films are now in very small and rapidly decreasing demand. On the other hand, new automatic film-metering cameras increasingly use a new 220 size as well as the existing 120 size roll film.

In response to this change in the market, ISO 732 now specifies only the 120 and 220 sizes of roll films.

This document is a preview generated by EVS

This page intentionally left blank

## Photography — Film dimensions — 120 and 220 sizes

### 1 Scope

This International Standard specifies the dimensions for 120 and 220 sizes of roll films and for the spool common to both. It delineates the dimensions of the film itself; backing paper for 120 size of roll films; leader, trailer for 220 size of roll films, and pasters and their respective placement. The film area to be reserved before the first and after the last exposures is also specified.

In this International Standard, metric units are prime.

### 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 1:1975, *Standard reference temperature for industrial length measurements*.

ISO 554:1976, *Standard atmospheres for conditioning and/or testing — Specifications*.

### 3 Definitions

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

**3.1 backing paper (for 120 size of roll films):** The protective strip of paper to which the film is attached. Backing paper is usually black on one side and coloured on the other side. Numerals are usually printed on the coloured side in a position where they can be viewed through the camera window.

**3.2 core of spool:** The cylindrical part extending between (and connecting) the flanges, around which the backing paper and film are wound.

**3.3 creep:** The difference in location of the film end relative to the numbers on the backing paper when wound on the spool, compared to their respective positions when laid out flat. This difference exists because the backing paper, wound outside the film strip, assumes a curve of greater circumference than the film strip for each successive convolution.

**3.4 end margin:** The distance from the end of the last picture to the end of the film strip. Included in the end margin is an allowance for attaching a developing clip or splicing tape.

**3.5 exposure numbers:** The consecutive numbers, or sets of numbers, printed on the outside of the size 120 backing paper away from the film (usually on the coloured side). The spacing of exposures is determined by these numbers as they are brought into position successively in the window of the camera.

**3.6 flanges of spool:** The discs attached to each end of the spool core, between which the film and backing paper (or leader and trailer) are wound. The main function of the flanges is to prevent light from reaching the edges of the film.

**3.7 key slot:** See 3.16.

**3.8 leader (for 220 size of roll films):** A short strip of paper attached to the first-exposure end of the film (see 3.15).

**3.9 length of film:** The linear lengthwise dimensions of the filmstrip.

**3.10 projected film length:** For 120 size of roll films, a dimension that shows the distance, measured along the backing paper, between the two ends of the film when it is wound on the spool. The projected film length is the flat film length plus the creep.

**3.11 register mark for automatic cameras:** For 120 size of roll films, a symbol or mark at a specific dis-