International Standard 29

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

Cinematography — Projector usage of 8 mm Type R silent motion-picture film for direct front projection — Specifications

Cinématographie — Utilisation du film muet 8 mm type R dans le projecteur, pour la projection frontale directe — Spécifications

First edition — 1980-10-15

UDC 778.55 : 771.531.352

Ref. No. ISO 29-1980 (E)

Descriptors : cinematography, motion picture film, motion picture film 8 mm, specifications.

Price based on 2 pages

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 29 was developed by Technical Committee ISO/TC 36, *Cinematography*, and was circulated to the member bodies in October 1979.

It has been approved by the member bodies of the following countries :

Austria	Germany, F. R.	Spain
Belgium	Italy	Sweden
Canada	Japan	Switzerland
Czechoslovakia	Libyan Arab Jamahiriya	United Kingdom
Denmark	Mexico	USA
France	South Africa, Rep. of	USSR

No member body expressed disapproval of the document.

This International Standard cancels and replaces ISO Recommendation R 29-1956, of which it constitutes a technical revision.

Printed in Switzerland

Cinematography — Projector usage of 8 mm Type R silent motion-picture film for direct front projection — Specifications

1 Scope and field of application

This International Standard specifies the emulsion orientation, the rate of projection and the position of the projected image area in the projector, intended for direct front projection of 8 mm, Type R silent motion-picture film.

2 References

ISO 28, *Cinematography — Camera usage of* 8 mm *Type R motion-picture film — Specifications.*

ISO 74, *Cinematography — Image area produced by camera aperture and maximum projectable image area on* 8 mm *Type R motion-picture film — Positions and dimensions.*

3 Emulsion orientation

When the projected film is the original, after reversal processing, the emulsion orientation of the film shall be towards the projection lens as shown in the figure.

NOTE — Under certain conditions films may be produced by contact printing from original photographs.

Such films may be threaded into the projector with the emulsion side towards the light source. The appropriate orientation should be indicated on the leader or on the container. There should be no scenes with different emulsion orientation on the same film or on the same reel.

4 Rate of projection

The rate of projection shall be 18 ± 1 frames per second (preferred) or 16 $^{+\,2}_{\ 0}$ frames per second.

NOTES

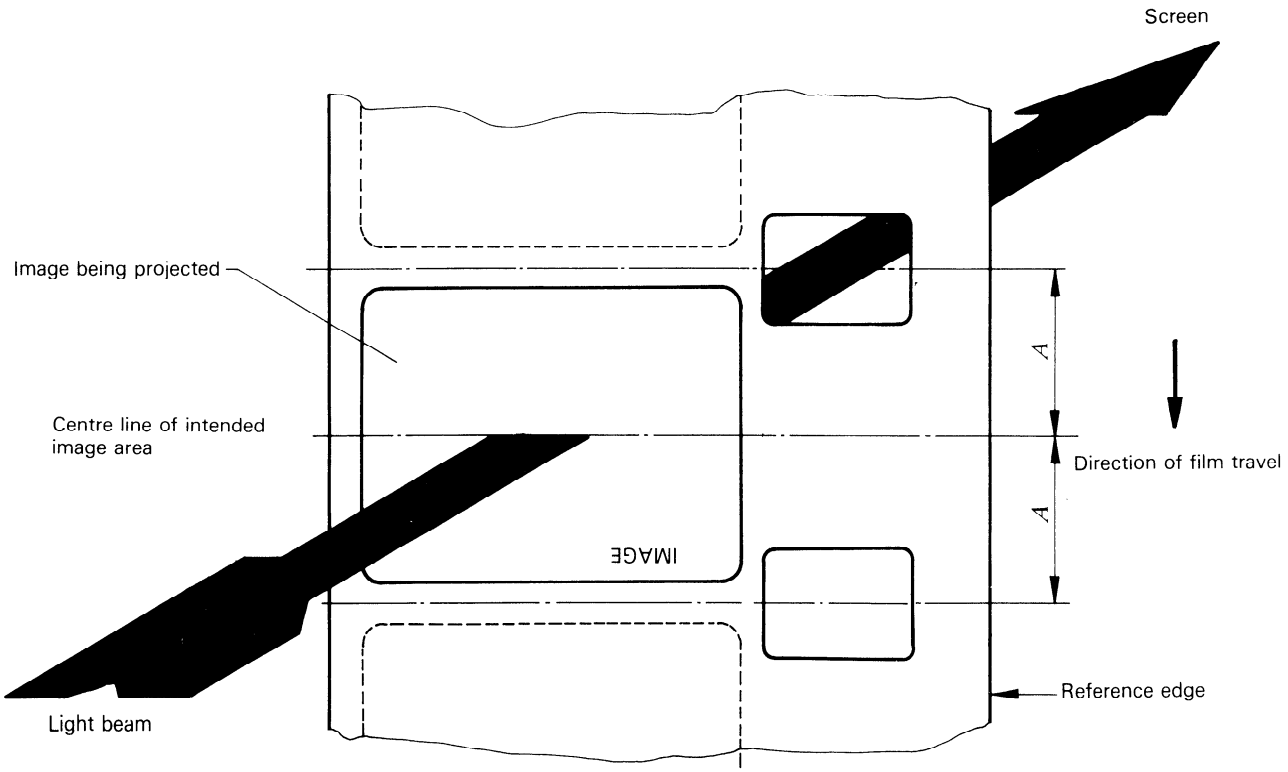
1 In silent projectors not having a variable rate of projection, the nominal rate should be either 18 (preferred) or 16 frames per second. Silent projectors having manually adjustable speed should be capable of reaching projection rates of 16 and 18 frames per second.

2 Under certain conditions, the rate of projection of silent motion-picture films may be 24 frames per second.

5 Position of the projected image area

The projected image area should be located in the vertical direction so that the horizontal axis of the projected area passes through the middle of the distance between the film perforations, as shown in the figure (dimension A).

It is recommended that projectors be provided with a framing movement of 0,4 mm (0.015 in) minimum above and below the nominal position.



The film is shown as seen from the light source in the projector looking towards the projector lens.