## International Standard



1785

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•MEЖДУНАРОДНАЯ OPFAHИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

# Cinematography — Printed 8 mm, Type S, image area on 16 mm motion-picture film perforated 8 mm, Type S (1-4) — Position and dimensions

Cinématographie — Surface d'image des copies de film 8 mm, type S, sur film 16 mm perforé 8 mm, type S (1-4) — Position et dimensions

Second edition - 1983-11-01

### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (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 authorized 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 1785 was developed by Technical Committee ISO/TC 36, Cinematography.

This second edition was submitted directly to the ISO Council, in accordance with clause 6.11.2 of part 1 of the Directives for the technical work of ISO. It cancels and replaces the first edition (i.e. ISO 1785-1972), which had been approved by the member bodies of the following countries:

Australia Greece South Africa, Rep. of Austria Iran Spain Belgium Israel Sweden Italy Switzerland Canada Czechoslovakia Japan Thailand Netherlands United Kingdom Egypt, Arab Rep. of **USA** France Peru Germany Romania

No member body had expressed disapproval of the document.

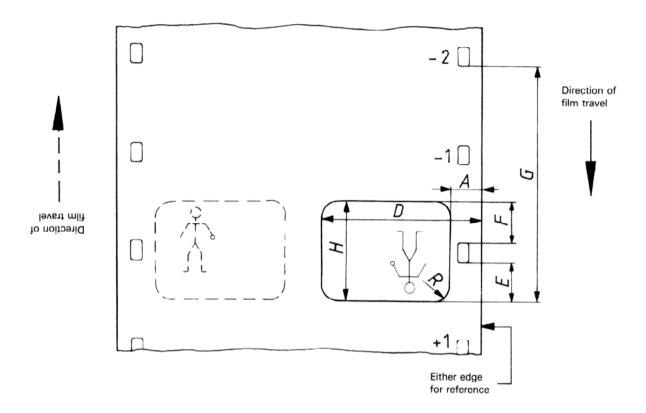
# Cinematography — Printed 8 mm, Type S, image area on 16 mm motion-picture film perforated 8 mm, Type S (1-4) — Position and dimensions

#### 1 Scope and field of application

This International Standard specifies the position and dimensions of the 8 mm, Type S printed picture areas for negative/positive and reversal printing on 16 mm motion-picture film perforated 8 mm, Type S, in positions 1 and 4.

#### 2 Dimensions

**2.1** The dimensions shall be as shown in the figure and given in the table and apply to the image formed on recently exposed and processed film.



Figure

Table

Dimension	mm	in
A max.	1,47 7,16	0.058 0.282
D min. H min. (see note 1)	4,14	0.163
G (see the annex A.1 and A.2)	9,98 ± 0,05 0.13	0.393 ± 0.002 0.005
R max. E and F (see note 3)	0,13	0.005

#### NOTES

- 1 Dimension H is minimum. In practice the value should be such that the frame line between pictures is opaque in the final print intended for projection.
- 2 When a photographic sound record is included on the print, it will be necessary to restrict the value of dimension *D* to avoid intrusion into the sound track area (see the annex clause A.5).
- 3 Dimensions E and F should not differ from each other by more than 0,20 mm.
- **2.2** Two images may be printed on this film. The image on the left-hand side is inverted and symmetrical to that on the right-hand side. The dimensions for this image, however, are taken from the left-hand edge of the film which then becomes the reference edge.

- **2.3** The angle between the horizontal edges of the picture image and the corresponding reference edge of the film shall be  $90 \pm 1/2^{\circ}$ .
- **2.4** The angle of the vertical edges of the picture images shall be  $0 \pm 1/2^{\circ}$  to the corresponding reference edge of the film.

#### 3 Bibliography

ISO 1781, Cinematography — Projector usage of 8 mm, Type S motion-picture film for direct front projection.

ISO 1787, Cinematography — Camera usage of 8 mm motion-picture film perforated Type S.

ISO 3645, Cinematography — Image area produced by 8 mm Type S motion-picture camera aperture and maximum projectable image area — Positions and dimensions.

ISO 4244, Cinematography — Photographic sound record on 8 mm Type S motion-picture prints — Position and width dimensions.

#### Annex

### **Additional data**

(This annex does not form part of the standard.)

- **A.1** If prints are made with a step printer, the registration device should be in the -2 perforation, or that perforation which corresponds to the -2 perforation when the final print stage is reached, to obtain maximum benefit of cancellation as films are projected in accordance with ISO 1781, which specifies the -2 position for projected films.
- **A.2** To provide understanding in the design and use of printers, dimension *G* specified in the figure and table provides an image ideally centred vertically on the perforation when the height is *H* min., with a reference dimension of 7,90 mm (0.311 in) from the positioning perforation to the horizontal centre-line of the intended image.

When film having a perforation pitch of 4,227 mm (0.166 4 in) is printed or when dimension H differs from H min., dimension G shall be changed to insure that the resultant image is centred vertically on the perforation, taking into account the processing shrinkage.

- **A.3** The "film travel" shown in the figure is to aid in illustrating the -2 perforation used to position the 8 mm print, and the direction of motion in the projector for the resulting 8 mm print if the figure is as seen from the light source in a projector used for direct front projection.
- **A.4** The parenthetical numerals have been added to the title of this International Standard to specify how the rows of perforations are placed on the film. This designation is necessary only when the film stock is wider than its end use and more than one combination of perforation rows is possible.
- **A.5** When a photographic sound record is included on the print, a recommended maximum value for dimension *D* of 7,20 mm (0.283 5 in) should be considered to conform to ISO 4244.