INTERNATIONAL STANDARD

**ISO
2906**

Cinematography — Image area produced by camera aperture on 35 mm motion-picture film — Position and dimensions

Cinématographie — Surface d'image délimitée par la fenêtre de la caméra sur les films cinématographiques 35 mm — Position et dimensions

© ISO 2002

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 2906:2002
https://standards.iteh.ai/catalog/standards/sist/ea2b782c-2534-44a8-9926-
e57f6c19695d/iso-2906-2002

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 2906 was prepared by Technical Committee ISO/TC 36, *Cinematography*.

This third edition cancels and replaces the second edition (ISO 2906:1984), which has been technically revised.

iTeh STANDARD PREVIEW

(standards.iteh.ai)

ISO 2906:2002
https://standards.iteh.ai/catalog/standards/sist/ea2b782c-2534-44a8-9926-
e57f6c19695d/iso-2906-2002

ISO 2906:2002
https://standards.iteh.ai/catalog/standards/sist/ea2b782c-2534-44a8-9926-
e57f6c19695d/iso-2906-2002

Cinematography — Image area produced by camera aperture on 35 mm motion-picture film — Position and dimensions

1   Scope

This International Standard specifies the dimensions of the camera aperture images and the relative positions of the vertical and horizontal centrelines of the intended image area with respect to the reference edge and the perforations of the camera negative film for 35 mm motion-picture cameras.

Motion-picture cameras used for different purposes require different aperture sizes. This International Standard specifies the image dimensions resulting from four styles of apertures used for the following purposes.

⎯ Style A: Four perforations per frame nonanamorphic sound motion pictures.

⎯ Style B: Four perforations per frame anamorphic sound motion pictures.

⎯ Style C: Four perforations per frame instrumentation photography and full-frame motion pictures.

⎯ Style D: Three perforations per frame motion pictures.

This International Standard also specifies the position of the photographic emulsion and the frame rate for 35 mm motion-picture cameras.

2   Dimensions

2.1   The dimensions shall be as shown in Figures 1 to 4 and Tables 1 to 4; they shall apply to measurements of the image as formed on freshly manufactured, recently exposed and processed film.

2.2   The horizontal edge of the aperture shall be at substantially 90° to the edge of the film, with the vertical edge parallel to the edge of the film.

3   Emulsion position

The emulsion shall be towards the camera lens, as shown in Figure 4.

4   Frame rate

The standard frame rate for motion-picture photography is 24 frames per second. However, it is recognized that nonstandard frame rates are sometimes used for specific applications. For example, 24, 25 or 30 frames per second may be used for motion pictures intended for television; higher or lower frame rates may be used for special motion-picture effects and analysis. The use of nonstandard frame rates requires notification and agreement of all parties concerned with the use of the particular film.

NOTE   The displacement of 1,27 mm (0,050 in), dimension G, of the vertical centreline of the image area for styles A and B is in accordance with current usage of low-shrinkage film base. However, many cameras are in use in which the vertical centreline is displaced by 1,40 mm (0,055 in), the dimension which was used prior to the development of low-shrinkage film base.
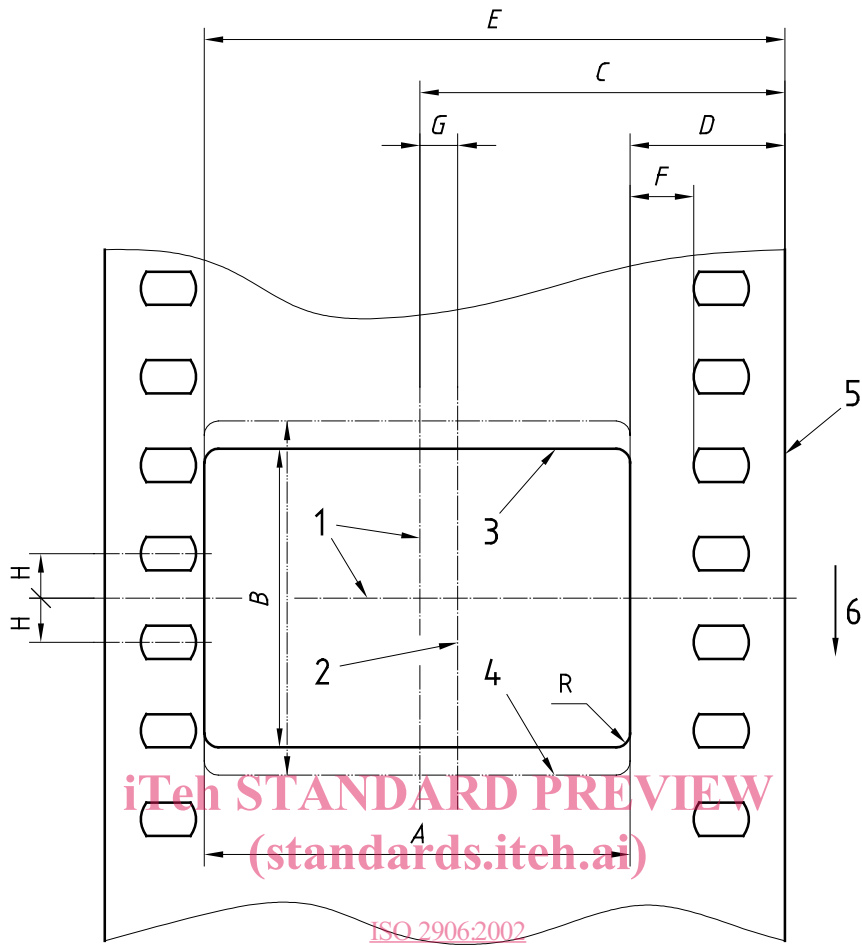
Film as seen from inside the camera looking towards camera lens

Key

1 Centre lines of the intended image area
2 Centre line of film
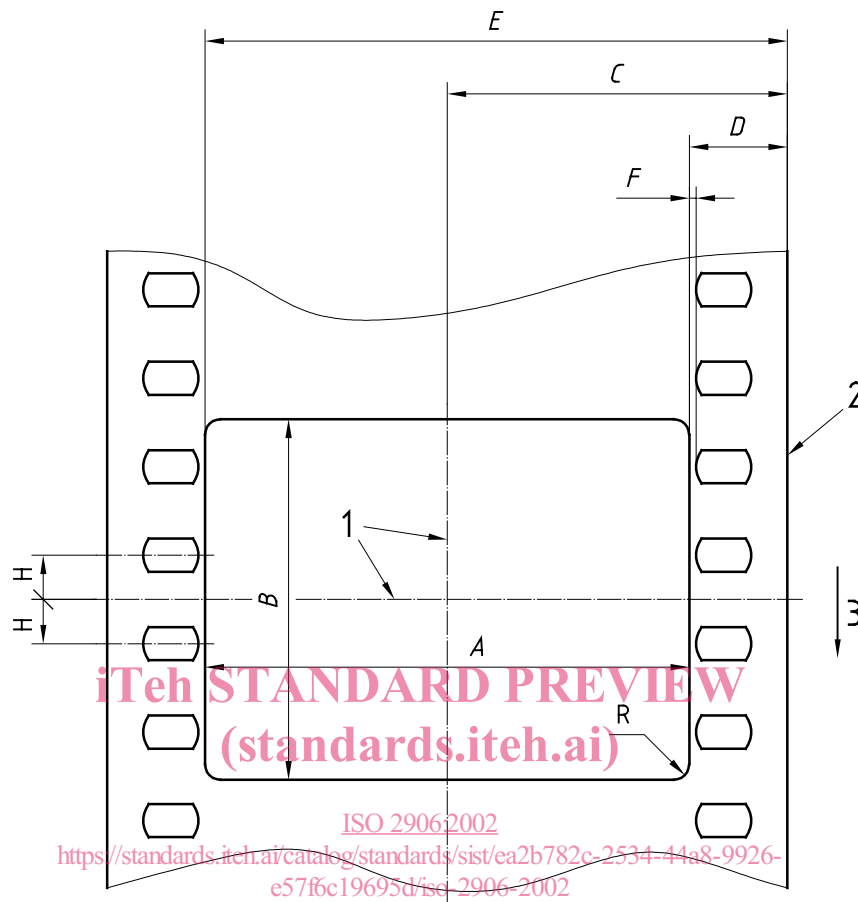3 Style A

4 Style B
5 Reference edge
6 Travel

Figure 1 — Styles A and B camera aperture image area

Table 1 — Style A specifications

Dimension	mm	in
A	22,00 nom.	0,866 nom.
B	$16,00^{+0,5}_{0}$	$0,630^{+0,02}_{0}$
C	$18,75 \pm 0,05$	$0,738 \pm 0,002$
D	7,75 max.	0,305 max.
E	29,74 min.	1,171 min.
F	2,95 nom.	0,116 nom.
G	1,27 nom.	0,050 nom.
H	$2,36 \pm 0,05$	$0,093 \pm 0,002$
R	0,80 max.	0,03 max.

Table 2 — Style B specifications
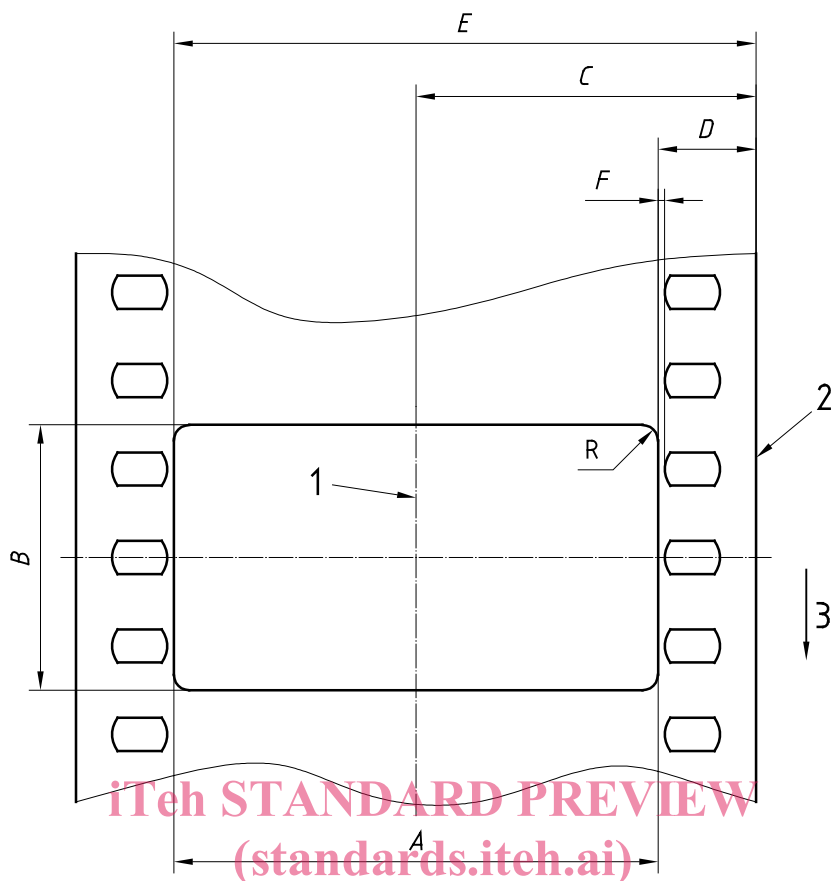
Dimension	mm	in
B	$18,59^{+0,20}_{0}$	$0,732^{+0,008}_{0}$

Key

1   Centre lines of the intended image area
2   Reference edge
3   Travel

Figure 2 — Style C camera aperture image area

Table 3 — Style C specifications

Dimension	mm	in
A	24,92 nom.	0,981 nom.
B	18,67 ± 0,05	0,735 ± 0,002
C	17,48 ± 0,05	0,688 ± 0,002
D	5,03 max.	0,198 max.
E	29,95 min.	1,179 min.
F	0,23 nom.	0,009 nom.
H	2,36 ± 0,05	0,093 ± 0,002
R	0,8 max.	0,03 max.

Key

1   Centre line of film
2   Reference edge
3   Travel

Figure 3 — Style D camera aperture image area

Table 4 — Style D specifications

Dimension	mm	in
A	24,92 nom.	0,981 nom.
B	13,87	0,546
C	17,48	0,688
D	5,03 max.	0,198 max.
E	29,95 min.	1,179 min.
F	0,23 nom.	0,009 nom.
R	0,51 max.	0,020 max.
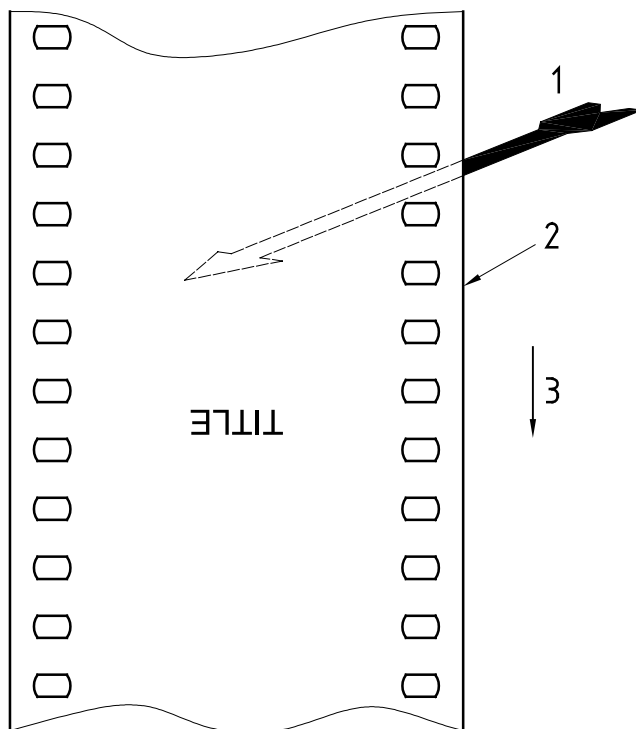
Key

1   Image-forming light
2   Reference edge
3   Travel

Figure 4 — Film viewed from inside camera looking towards camera lens