INTERNATIONAL STANDARD

ISO 17266

Second edition
2018-02

Cinematography — Multichannel analogue and digital photographic sound and control records on 35 mm motion-picture prints and negatives, and digital sound-control records on 70 mm motion-picture prints and negatives — Position and width dimensions

Cinématographie — Enregistrements des commandes et du son photographiques analogiques et numériques multicanaux sur copies et négatifs cinématographiques 35 mm, et enregistrements des commandes sonores numériques sur copies et négatifs cinématographiques 70 mm — Position et dimensions en largeur

Reference number
ISO 17266:2018(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO 17266:2002), which has been technically revised.

Cinematography — Multichannel analogue and digital photographic sound and control records on 35 mm motion-picture prints and negatives, and digital sound-control records on 70 mm motion-picture prints and negatives — Position and width dimensions

1 Scope

This document specifies the lateral, and vertical where applicable, positions and width dimensions of multichannel analogue and digital photographic sound records and control tracks on 35 mm and 70 mm motion-picture prints and negatives.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Positions and dimensions

4.1 The general positions of analogue, control and digital tracks for 35 mm motion-picture film are shown in Figure 1.

4.2 The positions and dimensions of the analogue area shall be as shown in Figure 2 and given in Table 1.

4.3 The positions and dimensions of the type I digital sound records for positive print film shall be as shown in Figure 3 and given in Table 2.

4.4 The positions and dimensions of the type I digital sound records for negative film shall be as shown in Figure 3 and given in Table 3.

4.5 The positions and dimensions of the type II digital sound records for positive print film shall be as shown in Figure 4 and given in Table 4.

4.6 The positions and dimensions of the type II digital sound records for negative film shall be as shown in Figure 4 and given in Table 5.

4.7 The positions and dimensions of the type III digital control track for positive print film shall be as shown in Figure 5 and given in Table 6.

4.8 The positions and dimensions of the type III digital control track for negative film shall be shown in Figure 5 and given in Table 7.

4.9 The positions and dimensions of the type III digital control track for 70 mm positive print film shall be as shown in Figure 6 and given in Table 8.

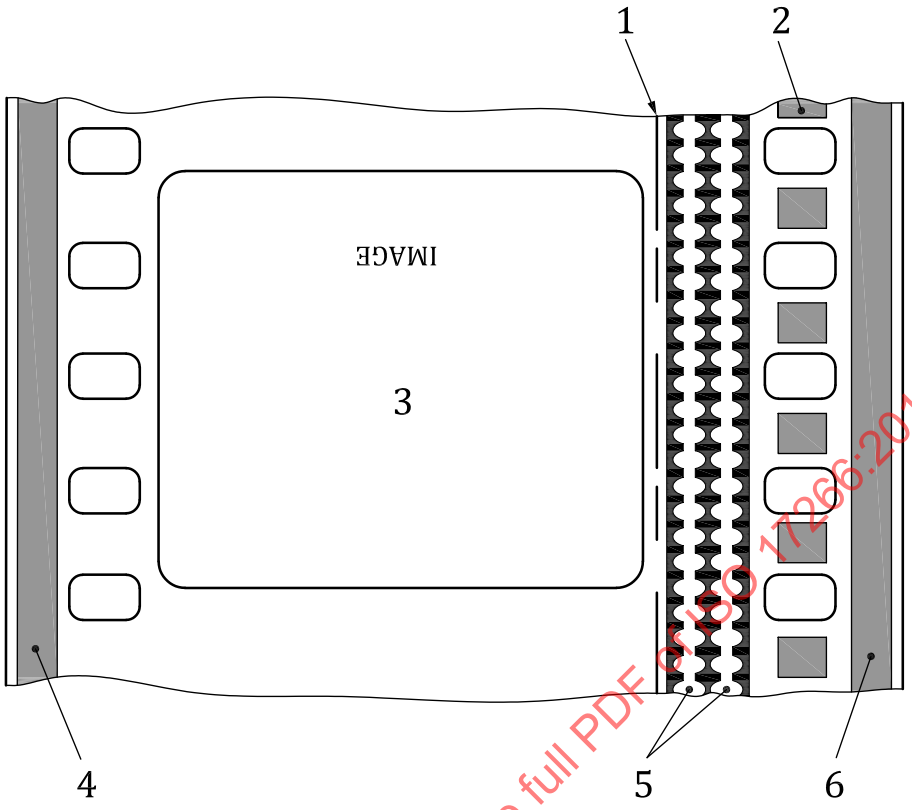
4.10 The positions and dimensions of the type III digital control track for 35 mm negative film for the printing of 70 mm positive print film shall be as shown in Figure 7 and given in Table 9.

5 Analogue sound records

5.1 Channel 1 and channel 2 (often known as left total and right total) shall be positioned in line at an angle of 90° ± 5 ′ to the reference edge of the film.

5.2 Channel 2 shall be recorded nearest the outer edge of the film, as shown in Figure 2.

5.3 The septum area between channels 1 and 2 shall be effectively opaque on prints.



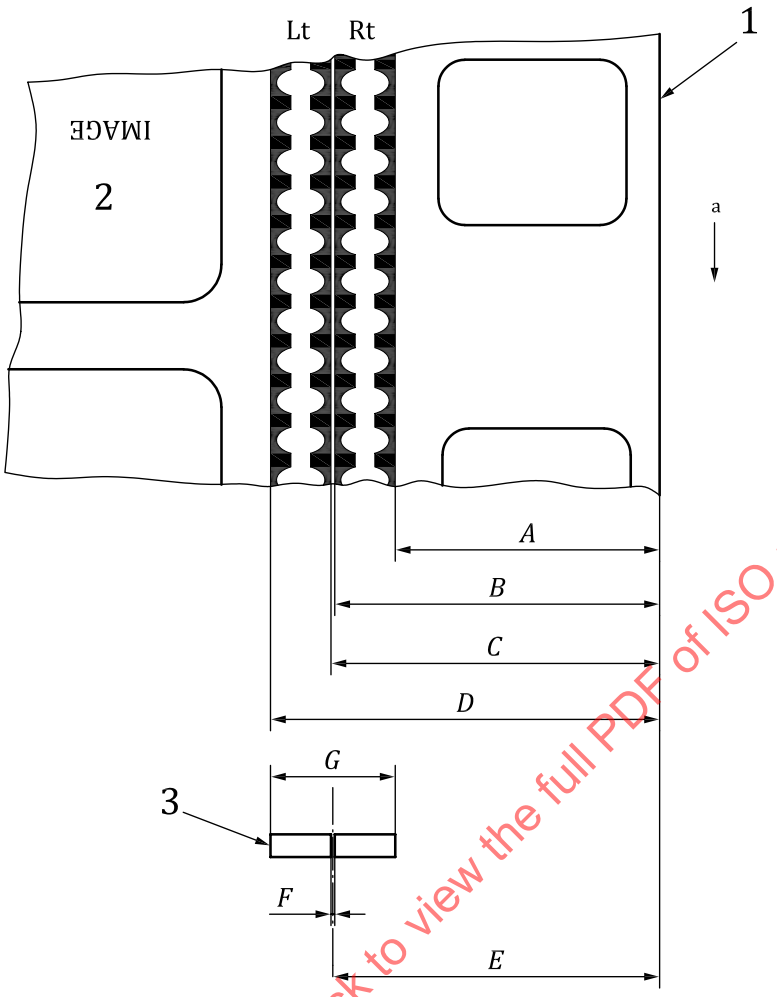
Key

1 type III
2 type I
3 image
4 P track type II
5 analogue sound records
6 S track type II

NOTE

Type I: Interperforation — digital.
Type II: Outerperforation — digital.
Type III: Control track.

Figure 1 — Composite audio data track and control placement



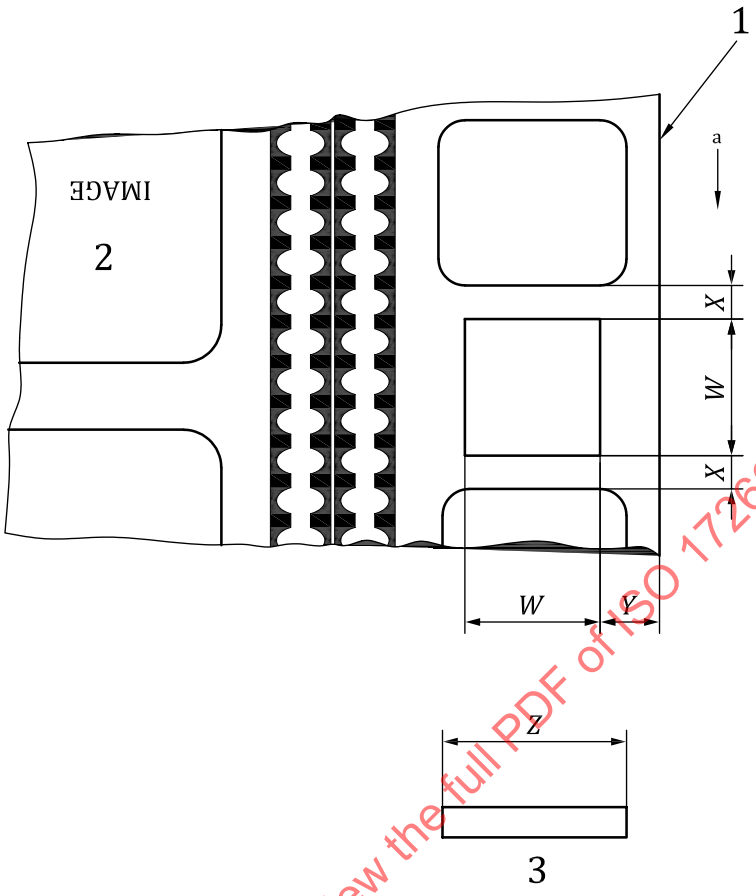
Key

1 reference edge
2 image
3 scanning area
a Direction of travel.

Figure 2 — Analogue area

Table 1 — SVA print dimensions

Dimension	mm	in
A_{ref}	5,21	0.205
B	6,05 ± 0,05	0.238 ± 0.002
C	6,30 ± 0,05	0.248 ± 0.002
D_{ref}	7,14	0.281
E_{ref}	6,18 ± 0,03	0.243 ± 0.001
F_{ref}	0,05	0.002
G_{max}	2,13	0.084
Channel 1 Lt Track Centre: 6,72 mm (0.264 5 in). Channel 2 Rt Track Centre: 5,63 mm (0.221 5 in).		



Key

1 reference edge
2 image
3 printer aperture
a Direction of travel.

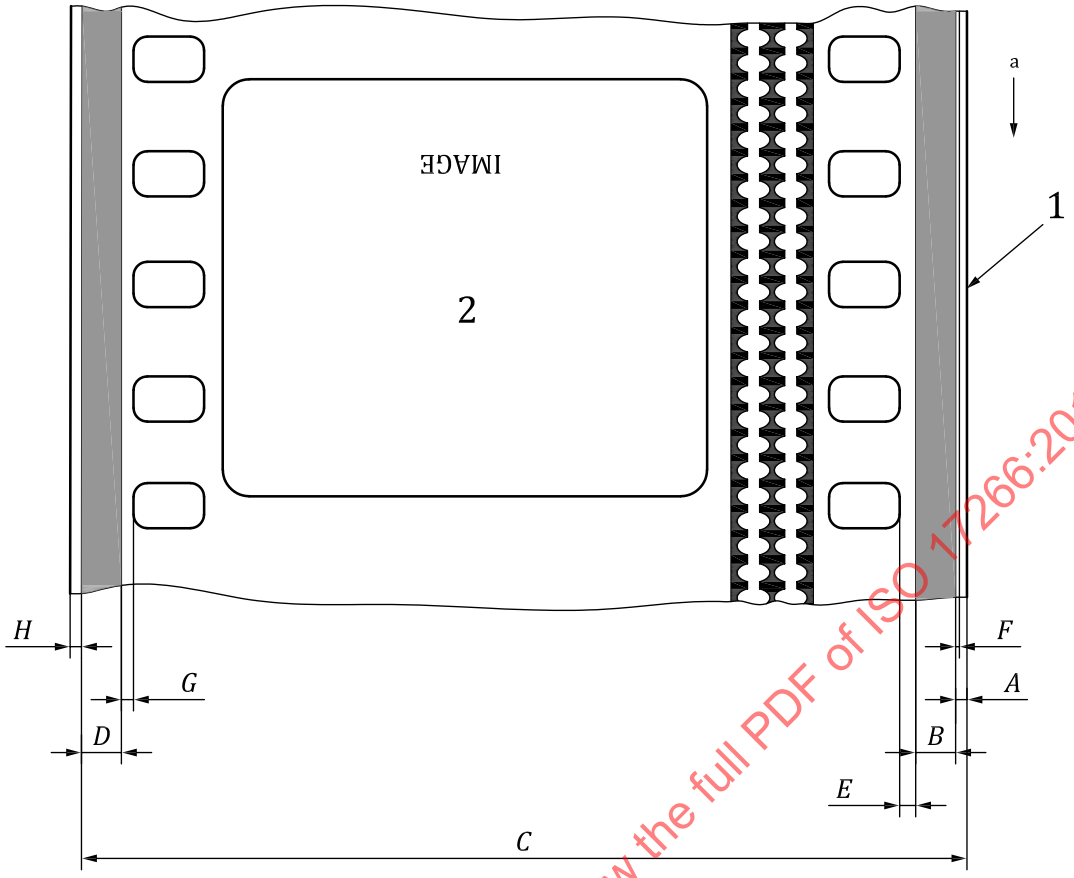
Figure 3 — Type I digital sound records

Table 2 — Type I digital print dimensions

Dimension	mm	in
W	2,41	0.095
X	0,160 ± 0,076 2	0.006 3 ± 0.003
Y	2,185 ± 0,076 2	0.086 0 ± 0.003
Z	2,77	0.109

Table 3 — Type I digital negative dimensions

Dimension	mm	in
X	0,160 ± 0,038 1	0.006 3 ± 0.001 5
Y	2,185 ± 0,038 1	0.086 0 ± 0.001 5



Key

1 reference edge
2 image
a Direction of travel.

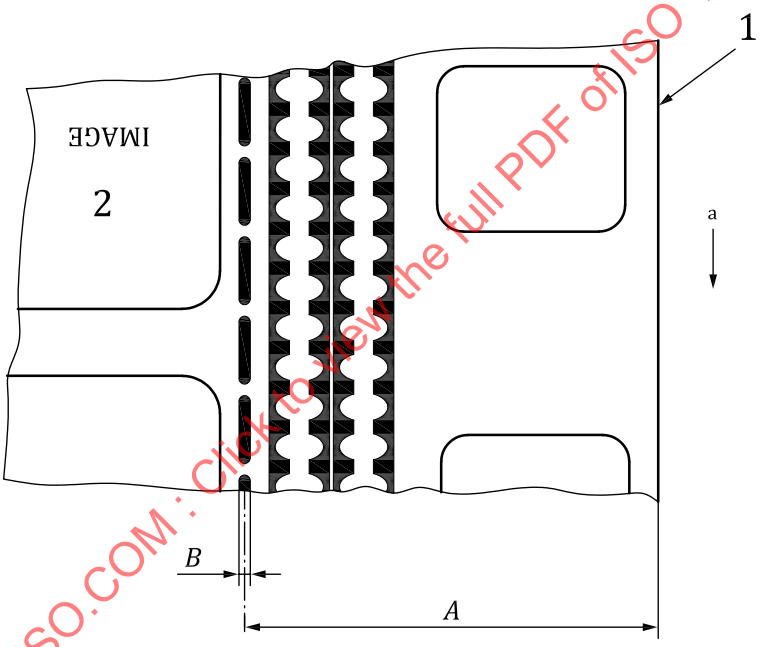
Figure 4 — Type II digital sound records

Table 4 — Type II digital print dimensions

Dimension	mm	in	Description
A	0,295 ± 0,05	0.011 61 ± 0.002 0	Reference film edge to leading edge of "white" tracking start (S)
B	1,536 ± 0,02	0.060 47 ± 0.000 8	Data and tracking area (64 spots × 24 µm)
C	34,681 ± 0,07	1.365 39 ± 0.002 8	Reference film edge to leading edge of "white" tracking start (P)
D	1,536 ± 0,02	0.060 47 ± 0.000 8	Data and tracking area (64 spots × 24 µm)
E	0,175 ± 0,05	0.006 89 ± 0.002 0	End of data to perforated edge margin (S)
F	$0{,}120^{+0{,}1}_{0}$	$0.004\,72^{+0.003\,9}_{0}$	Edge margin area (S)
G	0,175 ± 0,05	0.006 89 ± 0.002 0	End of data to perforated edge margin (P)
H	$0{,}120^{+0{,}1}_{0}$	$0.004\,72^{+0.003\,9}_{0}$	Edge margin area (P)

Table 5 — Type II digital negative dimensions

Dimension	mm	in	Description
A	0,295 ± 0,02	0.011 61 ± 0.000 8	Reference film edge to leading edge of "white" tracking start (S)
B	1,536 ± 0,02	0.060 47 ± 0.000 8	Data and tracking area (64 spots × 24 µm)
C	34,681 ± 0,04	1.365 39 ± 0.001 6	Reference film edge to leading edge of "white" tracking start (P)
D	1,536 ± 0,02	0.060 47 ± 0.000 8	Data and tracking area (64 spots × 24 µm)
E	0,175 ± 0,02	0.006 89 ± 0.000 8	End of data to perforated edge margin (S)
F	$0,120^{+0,1}_{0}$	$0.004\ 72^{+0.003\ 9}_{0}$	Edge margin area (S)
G	0,175 ± 0,02	0.006 89 ± 0.000 8	End of data to perforated edge margin (P)
H	$0,120^{+0,1}_{0}$	$0.004\ 72^{+0.003\ 9}_{0}$	Edge margin area (P)



Key

1 reference edge

2 image

a Direction of travel.

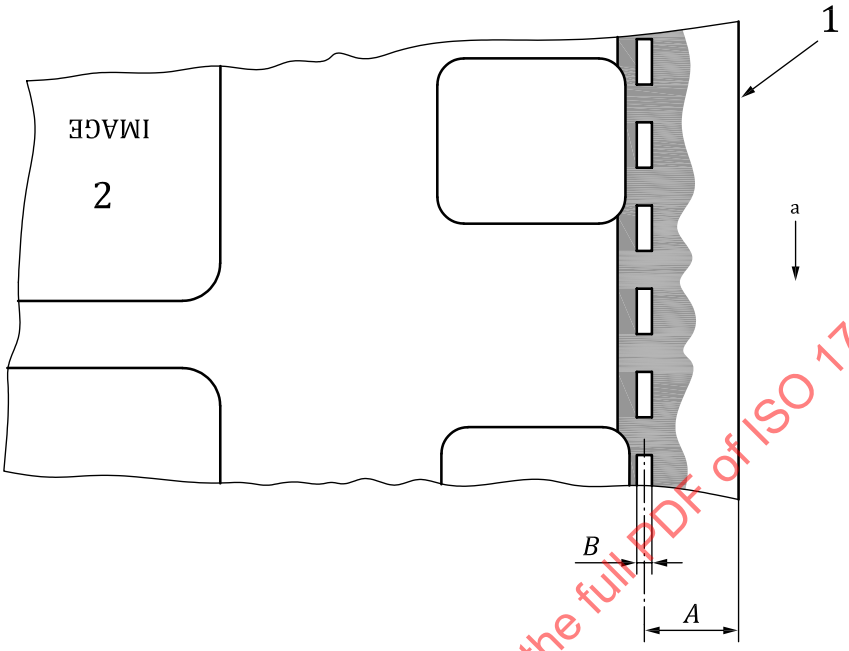
Figure 5 — Type III digital control track

Table 6 — Type III digital print dimensions

Dimension	mm	in
A	7,584 4 ± 0,05	0.298 6 ± 0.002
B	0,0762 to 0,1524	0.003 to 0.006

Table 7 — Type III digital negative dimensions, 35 mm

Dimension	mm	inch
A	7,584 4 ± 0,012 7	0.298 6 ± 0.000 5
B	0,076 2 to 0,203 2	0.003 to 0.008



Key

1 reference edge
2 image
a Direction of travel.

Figure 6 — Type III 70 mm control track-print

Table 8 — Type III digital print dimensions, 70 mm

Dimension	mm	in
A	4,953 ± 0,05	0.195 0 ± 0.002
B	0,762 ± 0,13	0.030 ± 0.005