International Standard 7455

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

Cinematography — Sound motion-picture camera cartridge, 8 mm Type S Model II — Slots and projection for film speed, cartridge hole and projection for film identification and colour-balancing filter — Dimensions and positions

Cinématographie — Chargeur, modèle II, pour caméra sonore, 8 mm type S — Encoches et bossage de sensibilité du film, cavité du chargeur et bossage pour l'identification du film et pour le filtre de correction de couleur — Dimensions et positions

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Descriptors : cinematography, motion-picture film, motion-picture film 8 mm, film packs, specifications, dimensions.

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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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7455 was prepared by Technical Committee ISO/TC 36, *Cinematography*.

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Cinematography — Sound motion-picture camera cartridge, 8 mm Type S Model II — Slots and projection for film speed, cartridge hole and projection for film identification and colour-balancing filter — Dimensions and positions

1 Scope and field of application

This International Standard specifies the dimensions and location of cartridge slots, projections and a hole for the 8 mm Type S Model II sound motion-picture film camera cartridge, which when included by the manufacturer, automatically preset some cameras in accordance with the effective film speed, and insert or withdraw a colour-balancing filter.

The combinations which are possible, together with the area available for visible film identification, are also described.

2 Reference

ISO 7453, *Cinematography — Sound motion-picture camera cartridge,* 8 mm *Type S Model II — Cartridge-camera fit and take-up core drive — Dimensions and specifications.*

3 Dimensions and characteristics

3.1 The dimensions and characteristics shall be as shown in the figures and given in the tables.

NOTE — All dimensions in imperial units are shown in the annex.

3.2 The location of the hole, slots and projections for effective film speeds and for film sensitivity identification shall conform to the figures and tables.

3.3 The dimensions for the film hole or projection intended for insertion or withdrawal of the colour-balancing filter apply if the cartridge is loaded with a colour film balanced for tungsten light exposure. This hole or projection is not included if the cartridge is loaded with colour film for daylight exposure.

3.4 The two slots and the projection used to specify the film speed, and the hole and the projection used to identify the inclusion of a tungsten-type film load, are mutually independent to allow design flexibility.

3.5 The dimensions and specifications of the external characteristics of the camera cartridge and the location of the datum planes used for dimensional reference are specified in ISO 7453.

3.6 The corners of the two slots for film speed may be rounded to 0,1 mm radius maximum.

3.7 The top and bottom corners of the projections for film speed and film identification may be rounded to 1,5 mm maximum.

3.8 If visual inscriptions of film data, such as film name, number and length of load, are to be provided, they should be on the label side of cartridge, see figure 2, and the film type and speed should be contained within the area specified.

NOTE — ISO (the International Organization for Standardization) has been advised that the Fuji Photo Film Company Ltd. owns the patents as listed below:

Country	Patent No.
Canada	825419
Germany, F.R.	1274443
USA	3599550 and 4334782

ISO takes no position with respect to the scope and validity of these patents. With respect to the patents, the Fuji Photo Film Company Ltd. has assured ISO that it will not assert any claim for infringement of such patents based on the manufacture, sale or use of cartridges in compliance with 3.1 and the figures and tables of dimensions.

4 Bibliography

ISO 1700, *Cinematography — 8 mm Type S motion-picture raw stock film — Cutting and perforating dimensions.*

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 3646, *Cinematography — Motion-picture camera cartridge,* 8 mm *Type S, Model II — Slots, projections and cartridge hole for indicating film speed, colour balance and film identification — Dimensions and positions.*

ISO 7454, *Cinematography — Sound motion-picture camera cartridge,* 8 mm, *Type S Model II — Camera run length and end notches in film — Dimensions and specifications.*

ISO 7456, *Cinematography — Sound motion-picture camera cartridge,* 8 mm, *Type S, Model II — Film load position.*

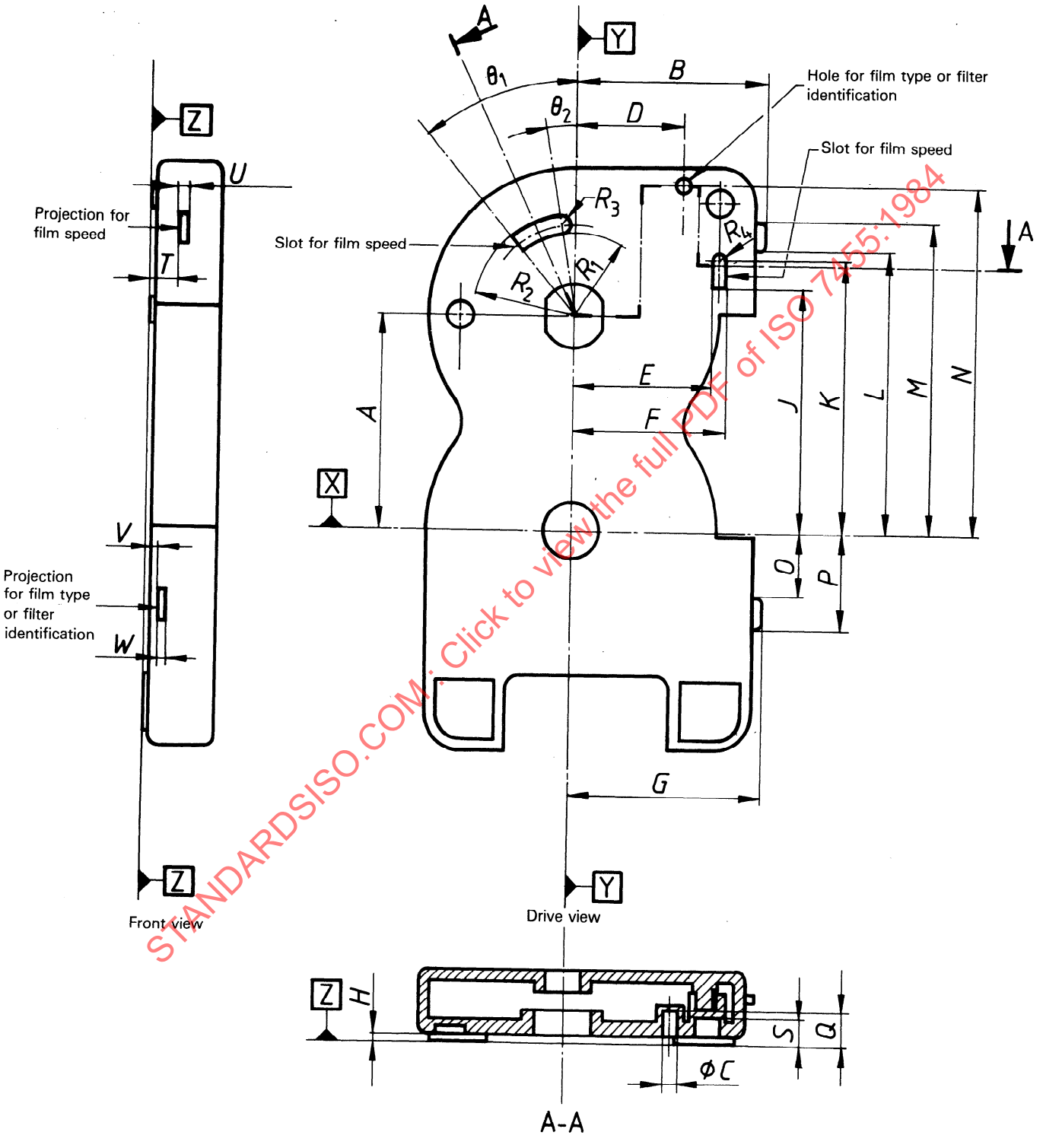

Figure 1 — Location and dimensions of slots, projections and hole

Table 1 — Dimensions

Dimensions	mm
A ref.	43,0
B	38,5 $^{0}_{-0,3}$
C min.*	3,0
D	21,0 ± 0,2
E	27,8 ± 0,2
F	30,8 ± 0,2
G	38,5 $^{0}_{-0,3}$
H min.	1,35
K min.	52,5
L	55,5 ± 0,4
M	61,5 ± 0,4
N	68,00 ± 0,35
O	12,5 ± 0,4
P	18,5 ± 0,4
R_1	16,1 ± 0,3
R_2	19,9 ± 0,3
R_3	1,9 ± 0,3
R_4	1,5 ± 0,2
D_1 max.	23,0
U min.	1,5
V	1,1 ± 0,3
W min.	1,5
S	2,7 ± 0,2
Q min.	6,0
θ_2	10 ± 1/2°

* Dimension *C* is the diameter

Table 2 — Dimensions controlling film speed values (see figure 1)

ISO speed		θ_1*	*J***	*T****
Arithmetic	Logarithmic	degrees	mm	mm
16	13°	22	51,0	11,6
20	14°	26	50,5	10,9
25	15°	30	50,0	10,1
32	16°	34	49,5	9,4
40	17°	38	49,0	8,6
50	18°	42	48,5	7,9
64	19°	46	48,0	7,1
80	20°	50	47,5	6,4
100	21°	54	47,0	5,6
125	22°	58	46,5	4,9
160	23°	62	46,0	4,1
200	24°	66	45,5	3,4
250	25°	70	45,0	2,6
320	26°	74	44,5	1,9
400	27°	78	44,0	1,1

* Tolerance for all values ± 1/2°

** Tolerances for all values ± 0,1 mm

*** Tolerances for all values ± 0,3 mm

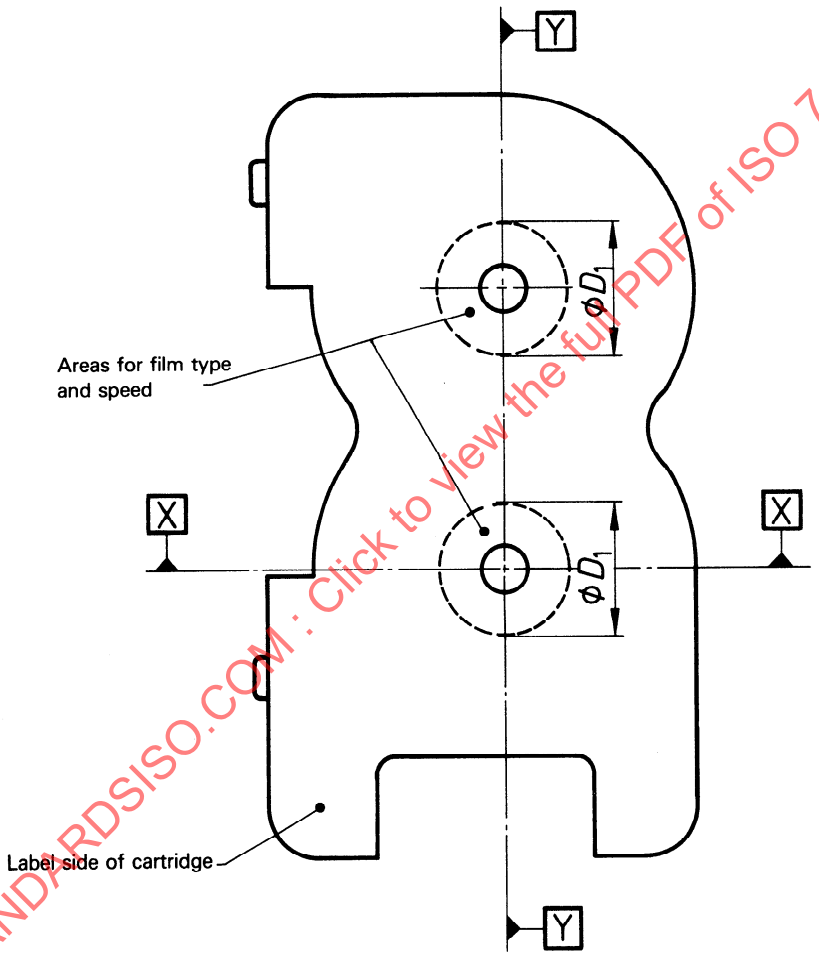

Figure 2 — Cartridge area for visible information or product identification