

SMPTE STANDARD

for Motion-Picture Film (8-mm Type S) — Model 1 Camera Cartridge — Cartridge-Camera Interface and Take-Up Core Drive



Page 1 of 4 pages

1 Scope

This standard specifies the dimensions of the 8-mm type S motion-picture film camera cartridge and cartridge-camera interface. Also specified are the dimensions of the take-up core drive opening and critical dimensions of the take-up core as well as the driving force, direction of drive, and recommended drive ratio.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below.

SMPTE 166-1999, Motion-Picture Film (8-mm Type S) — Exposure Control and Stock Identification — Sound and Silent Camera Cartridge Notches

3 Dimensions

3.1 The dimensions shall be as given in figure 1 and table 1.

3.2 The dimensions apply to an assembled cartridge with a film load at the time of manufacture.

3.3 Datum planes B, C, and A are referred to as first, second, and third, respectively. These planes, which are used for dimensioning, are

mutually perpendicular and are jointly called a datum reference frame.

3.3.1 Datum plane A is coincident with the center of a circle, located from plane B by the basic dimension T. The circle is in contact with the edges of the locating slot defined by dimensions A, O, P, and Q. The diameter of this circle is such that it applies regardless of feature size (RFS) of the locating slot (see annex A.3).

3.4 Datum features B, C, and A are primary, secondary, and tertiary, respectively.

3.4.1 Datum feature B is the unnotched, unlabeled surface of the cartridge. It is the primary datum feature and relates the cartridge to the datum reference frame by having a minimum of three points contact the first datum plane, B.

3.4.2 Datum feature C is the front seating surface of the cartridge. It is the secondary datum feature and relates the cartridge to the datum reference frame by having a minimum of two points contact the second datum plane, C.

3.5 Dimensions L, M, N, R₃, U, V, and W, measured from datum planes A and C to the depth of dimension E, as shown in the view of the label side in figure 1, describe the extent of both triangular recessed areas. The inboard wall of the recessed area, defined by dimensions L and N, shall be a smooth surface and may be tilted sufficiently from the perpendicular to datum plane B to allow proper release from a mold, when the cartridge is manufactured in a molding process.

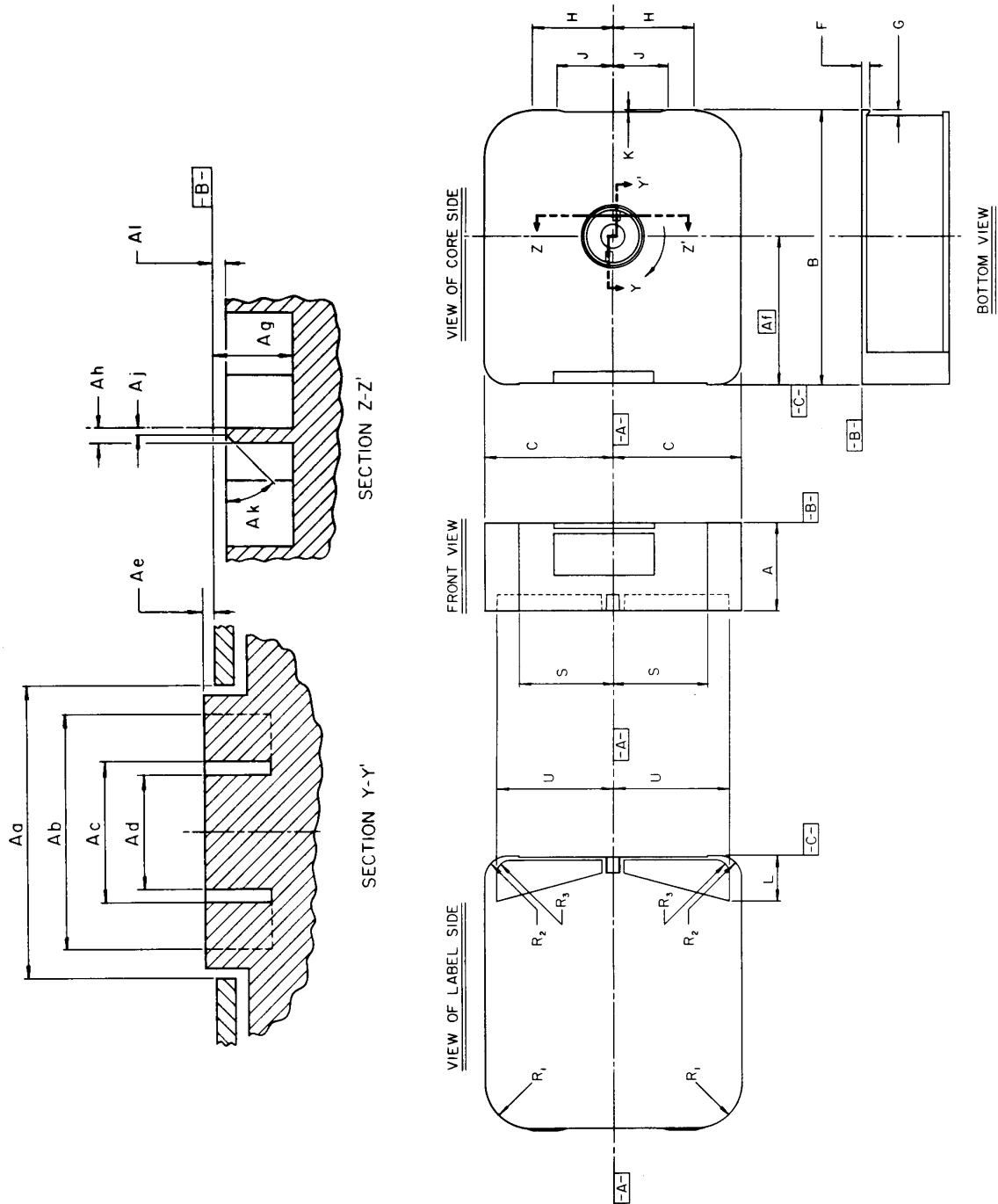


Figure 1 – Cartridge