

duction in color. Since that time, a number of improvements have been made in both quality and conveniences. The camera film now has an exposure index of 100, which allows photography in relatively low levels of illumination with incandescent light sources. Originally, color photography required high-intensity arc lights. The print film can now be processed at high speeds in a relatively short time.

Today, motion pictures in color are taken for granted. In addition to the Eastman color products, there are others that fit the same process and ease of use, from both Agfa-Gevaert and Fuji.

As has been shown, this came about as a result of a commitment by many people, much hard work, and explorations in many directions. The same kind of commitment, exploration, hard work, false beginnings and continual pulling back to try again, can in the future, lead to solutions to the many problems of society in such fields as energy, health care, ecology, and transportation. Just as a film process is perfectible, so

— given dedication and diligence — is our society.

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Standards & Recommended Practices

Proposed American National Standards

Two Proposed American National Standards are published here for a trial period and public review: V98.24M, Dimensions of Video Magnetic Tape Reels for 1-in Helical-Scan Video Recorders; and V98.25M, Dimensions of 1-in Video Magnetic Recording Tape. V98.24M covers the configuration and dimensions of reels for 1-in tape. The maximum overall thickness, width deviation, and

direction of magnetic orientation for 1-in tape are specified in V98.25M.

Comments should be addressed to Alex E. Alden, Manager of Engineering Services, at Society Headquarters before 1 September 1980. The proposals have been submitted to American National Standards Committee V98. All comments received through *Journal* publication will be reviewed prior to conclusion of action by that committee. — Alex E. Alden, *Manager of Engineering Services*

Dimensions of Video Magnetic Tape Reels for 1-in Helical-Scan Video Recorders

V98.24M

Page 1 of 3 pages

1. Scope

This standard specifies the configuration and dimensions for reels intended for 1-in magnetic tape for television recording on helical-scan video recorders, as specified in Proposed American National Standard Dimensions of 1-in Video Magnetic Recording Tape, ANSI V98.25M.

2. Reel Construction

The method of fastening or the fasteners used to hold the flanges to the hub shall not cause

protrusions beyond the hub mounting surface. The reel shall be symmetrical about the axis of rotation. Irregularities of configuration, such as flange openings, shall conform to this requirement.

3. Dimensions

The dimensions shall be as shown in the figures and tables. The dimensions apply to reels normalized at $23 \pm 1^\circ\text{C}$ and at 50 ± 2 percent relative humidity.

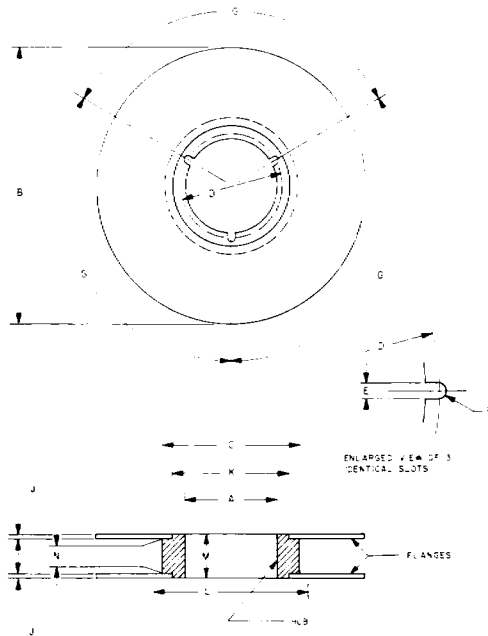


Fig. 1

Table 1
Reel Dimensions

Dimensions	Millimeters
A	76.20 \pm 0.10
B	— 0.00
C	See Table 2
D	114.30 \pm 0.25
E	82.55 \pm 0.05
F	5.56 \pm 0.15
G	2.77 ref
J	120° \pm 0.1°
K	2.39 max
L*	91.44 min
M	114.3 min
N	30.78 \pm 0.08
	25.91 \pm 0.05

*Outside surfaces of reel flanges between diameters K and L shall not extend beyond the surfaces defined by the actual Dimension M.

Table 2
Dimension B, Flange Diameters

Millimeters	Nominal Play Time in Minutes
228.60 \pm 0.25	60
266.70 \pm 0.25	90
298.50 \pm 0.25	120
355.60 \pm 0.25	180

NOTE 1: Reel shall meet tape clearance requirements when mounted on either side.

NOTE 2: Tape path clearance takes precedence over any tolerance build up. See Appendix A1 for measurement technique.

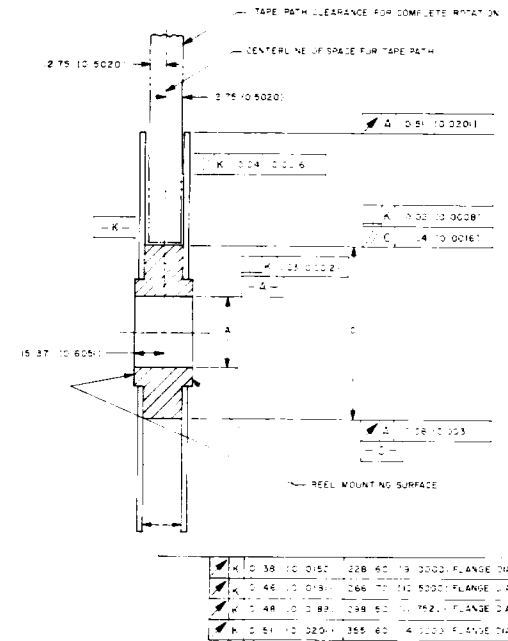


Fig. 2

Appendix

(The Appendix is not a part of this American National Standard, but is included for information purposes only.)

A1. With the reel mounted in the test apparatus, a width gauge of $25.50 \pm 0.01 - 0.00$ mm shall be mounted so the gauge centerline is 15.37 mm from the hub mounting surface and at 90° relative to the hub winding surface. The reel shall be rotated and the width gauge moved between the flanges from the flange rim to the hub surface. The width gauge shall not touch the flange during

this operation. When the reel is turned over so that the other side of the hub is the reel mounting surface, it shall also pass tape path clearance check.

A2. It is recommended that reels be identified in a manner making it readily apparent that they contain video tape in order to prevent inadvertent use of other types of tape having a similar appearance.

Proposed American National Standard
**Dimensions of 1-in
 Video Magnetic Recording Tape**

V98.25M

1. Scope

This standard specifies the dimensions of 1-in video magnetic recording tape, and the direction of magnetic orientation.

2. Dimensions

The dimensions of the magnetic tape shall be as specified below when the tape is normalized at 23 ± 1 C and 50 ± 2 percent relative humidity:

Dimensions	Millimeters
Width	25.349 ± 0.025
Maximum overall thickness	0.030

3. Direction of Orientation

The direction of orientation of the magnetic coating shall be longitudinal.