# American Standards—

## PH22.83-1952, PH22.38-1952 and Z22.33-1941

IN OCTOBER 1952, the American Standards Association approved one new standard, approved revision of a second standard and withdrawal of a third.

The new standard, PH22.83-1952, Edge Numbering 16mm Motion Picture Film, was published for trial and comment in the January 1951 *Journal*.

Since the change in PH22.38-1952 (formerly 22.38-1944) was so minor, consisting merely of the addition of a note, it was not considered necessary to publish the proposed revision for a trial period. The above two standards are the product of the 16mm and 8mm Motion Pictures Committee and are published on the following pages.

Approval has been withdrawn from the ASA Recommended Practice, Z22.33-1941, Nomenclature for Electrical Filters. This recommended practice was initiated by the Motion Picture Research Council as an outgrowth of some work on theater equipment. It was thought at the time that this method of designating electrical filters would be helpful in the motion picture field. It was useful for a while but has not been so for some time; therefore the SMPTE Sound Committee with the approval of the MPRC initiated withdrawal action about a year ago.—*H. K.*

# Correction—

## PH22.80-1950 and PH22.81-1950

AN ERROR has recently been discovered in two American Standards, Scanning Beam Uniformity Test Film for 16-Millimeter Motion Picture Sound Reproducers (Laboratory Type), PH22.80-1950 and (Service Type), PH22.81-1950, approved in June 1950 and published in the July 1950 *Journal*. The sound track width was given as 0.070 inch instead of 0.072 inch.

These standards are now being reprinted by ASA and republished here on pages 430 and 431.

American Standard

# Edge-Numbering 16-Millimeter Motion Picture Film

ASA
Reg. U. S. Pat. Off.

PH22.83-1952

*UDC 778.5

## 1. Purpose

**1.1** The purpose of this standard is to establish a uniform practice with respect to the interval between edge numbers when they are latent-image printed on 16-mm raw stock film. It is not intended to imply that all 16-mm film should be edge-numbered.

## 2. Edge-Numbering Distance

**2.1** The distance between consecutive numbers shall be 40 frames. Thus, the numbers will indicate film footage, subject to a small correction for shrinkage of the film.

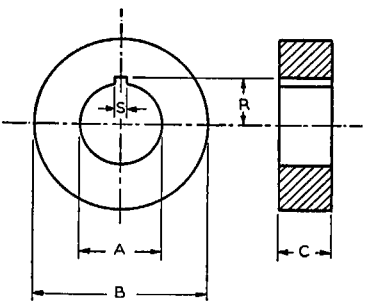
Approved October 8, 1952, by the American Standards Association, Incorporated
Sponsor: Society of Motion Picture and Television Engineers

*Universal Decimal Classification

American Standard

# Raw Stock Cores for 16-Millimeter Motion Picture Film

ASA
Reg. U. S. Pat. Off.
PH22.38-1952
Revision of
Z22.38-1944
*UDC 778.5




| | Millimeters | Inches |
|---|---|---|
| A | 25.90 ± 0.20 | 1.020 ± 0.008 |
| B | 50.00 ± 0.25 | 1.968 ± 0.010 |
| C | 15.50 ± 0.50 | 0.610 ± 0.020 |
| Recommended Practice | | |
| R | 16.70 ± 0.30 | 0.657 ± 0.012 |
| S | 4.00 ± 0.20 | 0.157 ± 0.008 |

Bore A to fit freely to hub 25.40 ± 0.1 mm or 1.000 ± 0.004-inch diameter.

It is permissible to reduce the cross-sectional area and to provide a slot in the periphery to facilitate starting the film on the core, so long as these details do not interfere with the stated dimensions. Except for the slot and keyway, the periphery and bore should present smooth, unbroken surfaces.

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American Standard

# Scanning-Beam Uniformity Test Film for 16-Millimeter Motion Picture Sound Reproducers (Laboratory Type)

ASA
Reg. U. S. Pat. Off.
Z22.80-1950
*UDC 778.534.4

## 1. Scope and Purpose

**1.1** This standard describes a film which may be used for determining the uniformity of scanning-beam illumination in 16-mm motion picture sound reproducers. The recorded sound track shall be suitable for use in laboratories and factories.

## 2. Test Film

**2.1** The film shall be a print from an original negative. It shall consist of a 1000-cycle, variable-area recording at full modulation of the 0.005-inch width and shall be approximately sinusoidal. The track shall move uniformly 0.067 inch from one edge of the scanned area to the other as shown in Fig. 1.

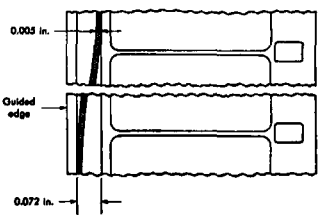


Fig. 1

**2.2** The position of the sound track relative to the ends of the light beam at any instant shall be shown by a diagram appearing in the picture area, the size and location of which is shown in American Standard Location and Size of Picture Aperture of 16-Millimeter Motion Picture Cameras, Z22.7-1950, or any subsequent revision thereof approved by the American Standards Association, Incorporated.

**2.3** The scanned area shall comply with the American Standard Sound Records and Scanning Area of 16-Mm Sound Motion Picture Prints, Z22.41-1946, and the film stock used shall be cut and perforated in accordance with American Standard Cutting and Perforating Dimensions for 16-Mm Sound Motion Picture Negative and Positive Raw Stock, Z22.12-1947, or any subsequent revisions thereof approved by the American Standards Association, Incorporated.

**2.4** The length of this film shall be approximately 34 feet.

NOTE: A test film in accordance with this standard is available from the Motion Picture Research Council or the Society of Motion Picture and Television Engineers.

## Appendix

*(This Appendix is not a part of this American Standard.)*

Before using the above test film it is recommended that correct placement of the scanning beam be determined by means of buzz-track test film as specified in American Standard Specification for Buzz-Track Test Film for 16-Mm Motion Picture Sound Reproducers, Z22.57-1947, or any subsequent revision thereof approved by the American Standards Association, Incorporated.

The uniformity of scanning beam illumination may be measured by means of a db meter connected to the output of the sound projector amplifier. The illumination of the scanning beam should be adjusted according to the instructions furnished by the manufacturer and the variation of the output as registered on the db meter should be observed. The illumination is considered satisfactorily uniform when the output reading as measured by the meter is within ±1½ db across the entire scanning slit.

Approved June 12, 1950, by the American Standards Association, Incorporated
Sponsor: Society of Motion Picture and Television Engineers
*Universal Decimal Classification

American Standard

# Scanning-Beam Uniformity Test Film for 16-Millimeter Motion Picture Sound Reproducers (Service Type)

ASA
Reg. U. S. Pat. Off.
Z22.81-1950
*UDC 778.534.4

## 1. Scope and Purpose

**1.1** This standard describes a film which may be used for determining the uniformity of scanning-beam illumination in 16-mm motion picture sound reproducers. The recorded sound track shall be suitable for use in the routine maintenance and servicing of the equipment.

## 2. Test Film

**2.1** The film shall be a print from an original negative. It shall consist of a 1000-cycle, variable-area recording at full modulation of the 0.005-inch width and shall be approximately sinusoidal. The track shall move uniformly 0.067 inch from one edge of the scanned area to the other as shown in Fig. 1.

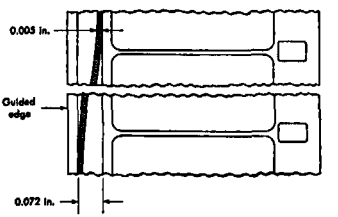


Fig. 1

**2.2** The position of the sound track relative to the ends of the light beam at any instant shall be shown by a diagram appearing in the picture area, the size and location of which is shown in American Standard Location and Size of Picture Aperture of 16-Millimeter Motion Picture Cameras, Z22.7-1950, or any subsequent revision thereof approved by the American Standards Association, Incorporated.

**2.3** The scanned area shall comply with American Standard Sound Records and Scanning Area of 16-Mm Sound Motion Picture Prints, Z22.41-1946, and the film stock used shall be cut and perforated in accordance with American Standard Cutting and Perforating Dimensions for 16-Mm Sound Motion Picture Negative and Positive Raw Stock, Z22.12-1947, or any subsequent revisions thereof approved by the American Standards Association, Incorporated.

**2.4** The length of this film shall be approximately 3½ feet.

NOTE: A test film in accordance with this standard is available from the Motion Picture Research Council or the Society of Motion Picture and Television Engineers.

## Appendix

(This Appendix is not a part of this American Standard.)

Before using the above test film it is recommended that correct placement of the scanning beam be determined by means of buzz-track test film as specified in American Standard Specification for Buzz-Track Test Film for 16-Mm Motion Picture Sound Reproducers, Z22.57-1947, or any subsequent revision thereof approved by the American Standards Association, Incorporated.

The uniformity of scanning beam illumination may be measured by means of a db meter connected to the output of the sound projector amplifier. The illumination of the scanning beam should be adjusted according to the instructions furnished by the manufacturer and the variation of the output as registered on the db meter should be observed. The illumination is considered satisfactorily uniform when the output reading as measured by the meter is within ±1½ db across the entire scanning slit.

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