

Standards and Recommended Practices

Approved American National Standards

The American National Standards Institute approved two American National Standards on October 22, 1985: ANSI/SMPTE 192-1985, Motion-Picture Equipment - Shipping Reels for 35-mm Prints; and ANSI/SMPTE 220-1985, Motion-Picture and Television Equipment - Camera Mounting Connections - $\frac{1}{4}$ -Inch-20 Thread and $\frac{3}{8}$ -Inch-16 Thread Tripod Screws. Copies of the standards are available for a nominal fee from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

Approved SMPTE Recommended Practices

Two SMPTE Recommended Practices were approved by the Society's Executive Committee for Standards Approval: RP 27.4-1985, Specifications for Operational Test Pattern for Checking Jitter, Weave and Travel Ghost in Television Projectors; and RP 46-1985, Density of Color Prints and Slides for Television. These and other SMPTE Recommended Practices are available from Society Headquarters for \$3.00 each.

Proposed American National Standards

Published here for a trial period and public review are two Proposed American National Standards: SMPTE 221, Motion-Picture Film (70-mm) - Magnetic Striping - Six-Track Audio Release Prints; and SMPTE 222M, Television - Monitor System Electro-Acoustic Response - Control and Review Rooms. The proposals will be submitted to the Executive Committee for Standards Approval if no adverse comments are received by March 1, 1986. Comments should be addressed to Alex E. Alden.

Approved International Standard

The International Organization for Standardization (ISO) approved an International Standard, the technical content of which is published here for your information. ISO 1780-1984, Cinematography - Motion-Picture Camera Cartridge, 8-mm Type-S Model 1 - Aperture, Camera Aperture Profile, Film Position, Pressure Pad and Pressure Pad Flatness - Dimensions and Specifications, is in agreement with American National Standard Dimensions and Characteristics of 8-mm Type-S Motion-Picture Camera Cartridge Aperture, Camera Aperture Profile, Film Position, Pressure Pad and Pressure Pad Flatness,

ANSI PH22.159.2-1980. This material is reproduced with permission from the ISO and is copyrighted by the American National Standards Institute, 1430 Broadway, New York, NY 10018, from which copies are available.

Proposed Editorial Revision

A proposed American National Standard is subject to a trial period and public review. The technical content is unaffected because the modification is editorial in nature. The change is being published for your information and comment. SMPTE 15M, Video Recording - 1-in. Type-B Helical Scan - Basic System Parameters (revision of ANSI C98.15M-1980 published in the April 1980 *SMPTE Journal*): Section 3.5 will read, "The control head gap shall be located at point Y (see figure) which lies on a line which is at $90^\circ \pm 2'$, measured from diameter *F-G* which is the centerline through the plate assembly." The specification previously read $90^\circ \pm 15'$.

Proposed Withdrawal of SMPTE Recommended Practice

On the recommendation of the Committee on Laboratory Services Technology, the Standards Committee has approved withdrawal of SMPTE Recommended Practice RP 22-1966, Specifying Graph Paper Used in Inter-Laboratory Exchange of Plotted Sensitometric Data. The practice is being withdrawn, since most laboratories exchange sensitometric strips rather than plotted curves because the differences between densitometers in any two laboratories overshadow any concern about a specific type of plotting paper. Also, laboratory surveys have confirmed a de-facto standard for the motion-picture industry that is far more useful than RP 22 could ever be. Comments on the proposed revision and the proposed withdrawal should be sent to Alex E. Alden prior to March 1, 1986. If no adverse comments are received by that date, the Executive Committee for Standards Approval will be requested to approve both proposals.

Reaffirmed SMPTE Recommended Practices

The Executive Committee for Standards Approval approved on September 19, 1985, the reaffirmation of two SMPTE Recommended Practices: RP 57-1974, Vertical Interval Reference (VIR) Signal; and RP 58-1974, Nomenclature for Devices Enclosing 8-mm Motion-Picture Film for Projection.

Alex E. Alden, Manager of Engineering

SMPTE Standards Subscription Service

For further information, write to: Standards Subscription Service, Engineering Department, Society of Motion Picture and Television Engineers, 862 Scarsdale Avenue, Scarsdale, NY 10583.

American National Standard for motion-picture equipment— shipping reels for 35-mm prints

Approved October 22, 1985

Sponsor: Society of Motion Picture and Television Engineers

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1. Scope

This standard specifies the dimensions of shipping reels for 35-mm motion-picture prints having a nominal film capacity of 1000 and 2000 ft (305 and 610 m).

2. Reference Standard

The following American National Standard is intended to be used in conjunction with this standard:

ANSI PH22.4-1983, Motion-Picture Equipment
— 35- and 70-mm Projection Reels

3. Dimensions

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

3.2 Dimension F defines the area over which the reel thickness, specified by Dimensions C_2 , applies.

3.3 Dimension B is not specified for the 1000-ft capacity reels inasmuch as currently manufactured reels with small hubs are not considered appropriate in view of the recommended flange-to-hub ratios (see Appendix A1).

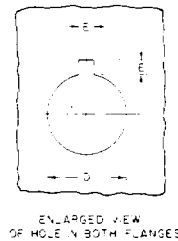
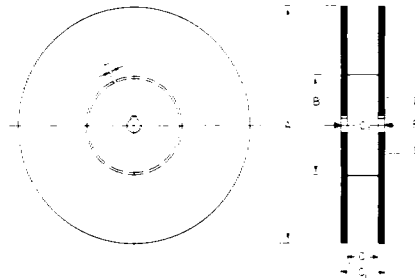


Fig. 1
Plan View and Cross Section of Reel

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Dimensions	Inches	Millimeters
A 1000 ft (305 m)	9.90 \pm 0.00 — 0.20	251.5 \pm 0.0 — 5.1
A 2000 ft (610 m)	14.50 \pm 0.03	368.3 \pm 0.8
B 2000 ft (610 m)	4.10 \pm 0.00 + 0.15	104.1 \pm 0.0 — 3.8
C	1.53 \pm 0.03	38.9 \pm 0.8
C_1	1.885 \pm 0.030	47.88 \pm 0.76
C_2	1.625 \pm 0.115 — 0.030	41.28 \pm 2.92 — 0.76
D	— 0.002 0.317 \pm 0.000	8.05 \pm 0.05 — 0.00
E	0.150 \pm 0.010	3.81 \pm 0.25
F	2.25 min	57.2 min
L	0.035 nom	0.89 nom

Note: Dimensions of 35-mm projection reels for motion-picture and television applications and 35- and 70-mm projection reels intended for use on combination 70/35-mm projectors and rewinds are specified in ANSI PH22.4-1983.

Appendix

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

A1. The use of shipping reels with small hubs (those resulting in a flange-to-hub ratio of 3:1 or greater) on projectors and rewind equipment already adjusted for reels with large hubs (flange-to-hub ratio of 3:1 or less) can subject film tension to drastic increases which may result in perforation damage by the sprocket.

A2. Some auxiliary projection equipment, such as make-up tables for platters, have an adjustable non-central spindle and a special hole may need to be placed in plastic and metal reels to accommodate the spindle. Figs. 2 and 3 specify the spindle holes on 2000-ft plastic and steel shipping reels in current use.

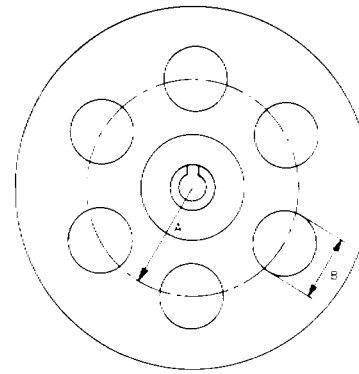


Fig. 2
2000-Ft Steel Reel Hub

Dimensions	Inches	Millimeters
A	1.313 \pm 0.002	33.35 \pm 0.05
B	0.803 \pm 0.002	20.40 \pm 0.05

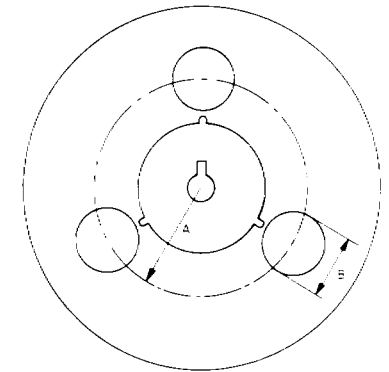


Fig. 3
2000-Ft Plastic Reel Hub

Dimensions	Inches	Millimeters
A	1.379 \pm 0.002	35.03 \pm 0.05
B	0.805 \pm 0.002	20.45 \pm 0.05

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American National Standards Institute, 1430 Broadway, New York, N.Y. 10018

American National Standard for motion-picture and television equipment— camera mounting connections— 1/4-inch-20 thread and 3/8-inch-16 thread tripod screws

Approved October 22, 1985

Sponsor: Society of Motion Picture and Television Engineers

Page 1 of 2 pages

1. Scope

1.1 This standard specifies the location of the head mounting sockets in the mounting plates of motion-picture and television cameras intended to mate with 1/4-inch-20 thread and 3/8-inch-16 thread locking screws.

1.2 The standard is not intended to prescribe design except for the dimensions affecting interchangeability; for this reason, the socket figures indicate two of many possible designs.

2. Reference Standards

The following American National Standards are intended to be used in conjunction with this standard:

ANSI B1.1-1982, Unified Inch Screw Threads (UN and UNR Thread Form)

ANSI PH3.101-1983, Photography (Cameras)—Tripod Connections for American Cameras (1/4-Inch-20 Thread)

ANSI PH3.102-1983, Photography (Cameras)—Tripod Connections for Heavy-Duty or Imported Cameras (3/8-Inch-16 Thread with Adapter for 1/4-Inch-20 Tripod Screws)

3. Tripod Screws

3.1 One-quarter inch tripod screws shall be in accordance with ANSI PH3.101-1983.

3.2 Three-eighth inch screws shall be in accordance with ANSI PH3.102-1983.

3.3 The mounting area on the camera base shall have the following thickness:

	Recommended	Minimum
1/4-in screw	0.240 in	0.188 in
3/8-in screw	0.359 in	0.250 in

4. Mounting Plate

4.1 Socket. The head mounting socket shall be on nominally 1-in (25.4-mm) centers and be located in line as shown in Figs. 1, 2, and 3.

4.2 1/4-in Screw. The thread in the head mounting socket shall be 3/8-inch-16 UNC-2A, in accordance with ANSI B1.1-1982, with the following diameter specifications:

	Minor Dia (Inches)	Pitch Dia (Inches)	Major Dia (Inches)
Min	0.196	0.2175	0.2500
Max	0.207	0.2223	—

4.3 3/8-in Screw. The thread in the head mounting socket shall be 3/8-inch-16 UNC-2A, in accordance with ANSI B1.1-1982, with the following diameter specifications:

	Minor Dia (Inches)	Pitch Dia (Inches)	Major Dia (Inches)
Min	0.307	0.3344	0.3750
Max	0.321	0.3401	—

Center of Gravity of Camera with Lens

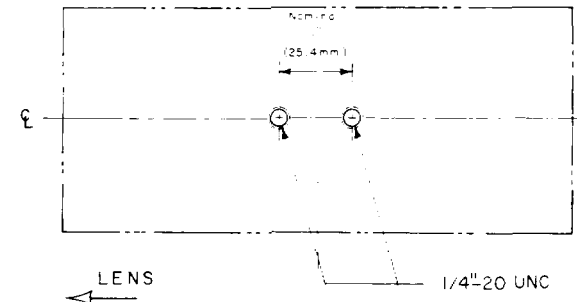


Fig. 1
1/4-Inch Head-Mounting Socket

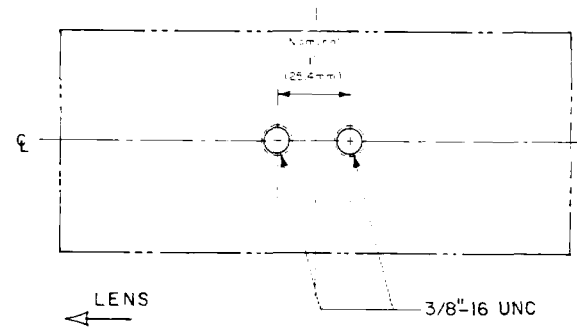


Fig. 2
3/8-Inch Head-Mounting Socket

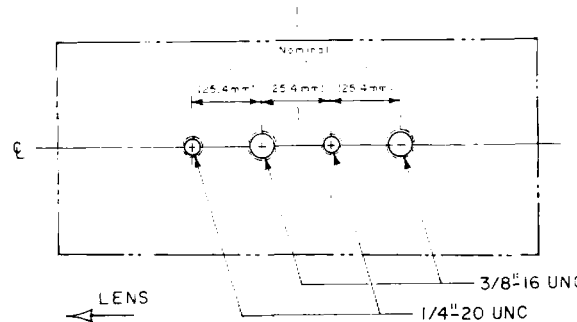



Fig. 3
Combined Head-Mounting Socket

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