

# Annual Meeting, 1957, Amendment of Bylaws

Amendments proposed to the Society's Bylaws were published in the August *Journal*, p. 487. They will be considered and voted on during the Annual Business Meeting of the Society at the Sheraton Hotel in Philadelphia on Friday, October 4, at 2:15 P.M.

## Errata

John R. Turner and Einar W. Jensen, "Some principles of spray processing," *Jour. SMPTE*, 65: 92-97, Feb. 1956.

On p. 94, second column, for the U.S. Patent number 2123455

read 2123445.

*A Directory for Members*, April 1957, Part II

On p. 28, for **Burris, Edward E.**, c/o Beeland-Wood Films, Inc.

read——,c/o Beeland-King Films, Inc.

On p. 60, for **Schlanger, Ben**, Consultant, Audio-Visual Bldg., 108 W. 37 St.

read——,Audio-Visual Building, 108 E. 37 St.

On p. 81, add under Ohio: Maple Hgts., **E. D. Bell**.

*Ed. Note:* Advice about bringing up to date the titles or positions of some members has been received since the April *Journal*. Instructions for correcting listings will be appreciated at any time — to help make a more accurate *Directory* when it is again published in April 1958.

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## motion-picture standards

### Reaffirmation of American Standard

PH22.74-1951, Zero Point for Focusing Scales on 16-Millimeter and 8-Millimeter Motion Picture Cameras, was reviewed by the 16mm and 8mm Committee, Standards Committee, ASA Sectional Committee PH22, and on July 19, 1957, it was reaffirmed without change by the ASA as PH22.74-1951. Copies of this standard are available at twenty-five cents each on order from the American Standards Association, Incorporated, 70 East 45 Street, New York 17.

### PH22.23, 8mm Motion-Picture Projection Reels

A proposed revision of American Standard Z22.23-1941 is published here for a three-month period of trial and criticism.

Revision of this standard was first initiated in 1946. A wide diversity of opinion concerning reel dimensions was found to exist among the reel manufacturers and several subsequent attempts were made to revise this standard. Agreement on the proposal was complicated by the large number of 8mm reel manufacturers and the insistence on a slotted keyway on both flanges. Consideration of the numerous recommendations and comments submitted to the

16 & 8mm and Standards Committees was a lengthy process and this proposal is the result of many meetings, reports and revisions.

Z22.23-1941 has been completely revised to include a change in title, addition of a scope, description of dimensions, notes, appendix and the inclusion of specifications for 200, 400, 600 and 800-ft reels rather than the single 200-ft reel dimensions specified in the old standard.

All comments should be sent to J. Howard Schumacher, SMPTE Staff Engineer, prior to December 15, 1957. If no adverse comments are received, the proposal will then be submitted to ASA Sectional Committee PH22 for further processing as an American Standard.—  
*J.H.S.*

# 8mm Motion-Picture Projection Reels

PH22.23

Rev. 222.23-1941

Page 1 of 2 Pages

## 1. Scope

1.1 This standard specifies the dimensions for 8mm motion-picture projection reels having film capacities of 200, 400, 600 or 800 ft.

1.2 The note is a part of the standard.

## 2. Dimensions

2.1 The dimensions shall be as specified in the diagram and tables.

2.2 Dimension C shall be measured between the inside faces of the two reel flanges. If spring fingers are used to engage the edges of the film, dimension C shall be measured with the fingers fully expanded.

2.3 The measurement of dimension G shall include any embossing.

2.4 Dimension H shall be measured at the core and shall include rivets, lugs and any other protrusions.

2.5 Dimension J shall apply within a circle of radius 1/2 in. (12.7mm) or more, centered on the spindle-hole axis.

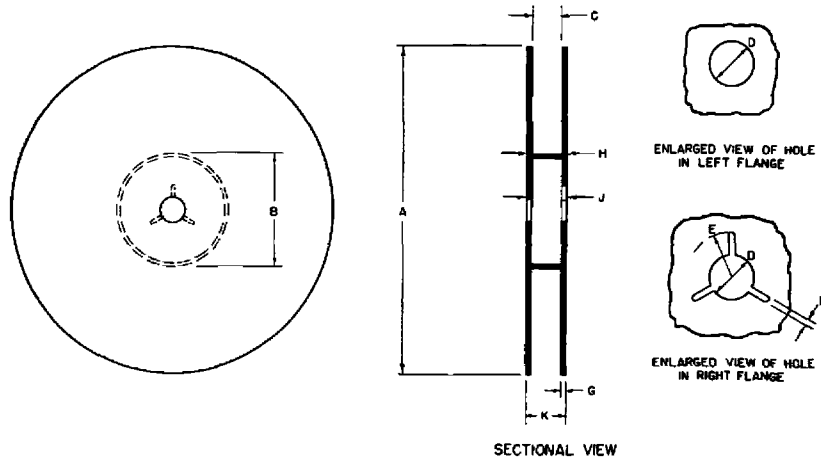
2.6 Dimension K shall be measured at the periphery of the reel.

2.7 The maximum flange and core eccentricity shall be 0.010 in. (0.25mm). The total maximum deviation may be 0.020 in. (0.51mm), measured from the spindle-hole centerline.

2.8 Lateral runout, dimension L, is the maximum departure of any point on a flange of the reel from the intended plane of rotation of that point, when the reel is rotated on an accurate and tightly fitted shaft. This departure can be in either direction from the plane; therefore, the total excursion can be twice the numerical value shown.

### NOTE

The drive side of the reel shall have one or more keyways, but preferably an odd number. There shall be no driving keyways in the other side of the reel.



**TABLE I**

Capacity of Reel		Dimension	Inches		Millimeters	
Feet	Meters		Max	Min	Max	Min
200	61	A	5.031	5.000	127.79	127.00
		B	2.000	1.500	50.80	38.10
		L	0.057		1.45	
400	122	A	7.031	7.000	178.59	177.80
		B	2.500	1.500	63.50	38.10
		L	0.080		2.03	
*600	183	A	9.031	9.000	229.39	228.60
		B	3.531	3.469	89.69	88.11
		L	0.103		2.62	
*800	244	A	10.531	10.500	267.49	266.70
		B	4.906	4.844	124.61	123.04
		L	0.120		3.05	

\*See Appendix f

**TABLE II**

Dimension	Inches	Millimeters
C	0.350 ± 0.030	8.89 ± 0.76
D	0.319 Max	8.10 Max
	0.316 Min	8.03 Min
E	0.312 ± 0.005	7.93 ± 0.13
F	0.070 Max	1.78 Max
	0.060 Min	1.52 Min
G	0.091 Max	2.31 Max
	0.025 Min	0.64 Min
H	0.562 Max	14.28 Max
J	0.450 Max	11.43 Max
K	0.562 Max	14.28 Max

### APPENDIX

- Dimension D was chosen to give sufficient clearance between the reels and the largest spindles normally used on 8mm projectors.
- The nominal value of C was chosen to provide proper lateral clearance for the film. The channel is narrow enough to prevent the film from wandering laterally too much as it is coiled, a condition which causes loose winding and excessively large rolls.
- It is recommended that the driven flange have at least three driving slots so that it will not be necessary to turn the reel more than 120 degrees in order to engage it with the driving key of the spindle. An odd number of slots is suggested so that the keyway cannot come into alignment with the spring that normally latches the reel on the spindle and thus allow the reel to move along the spindle.
- When the ratio of reel flange diameter (A) to core diameter (B) is small, there tends to be less variation in the tension to which film is subjected by the take-up mechanism throughout the projection of a roll of film. This is particularly true if a constant torque device is used. In this standard, the outside diameters of the flanges (A) were made as large as practicable commensurate with past practice in the design of projectors, reel containers, rewind units, and similar equipment. This made it possible to specify relatively large cores (which are desirable) and to attain reasonably small flange-to-core ratios.
- For 200 and 400-ft reels, rather large tolerances are given for B in order to include reels of current manufacture which have given reasonably satisfactory service. When new reels are designed, or when present reels are re-tooled, the cores for the 200 and 400-ft reels should be made in accordance with the maximum values shown in the table. If this is done, it may be possible to have future issues of this standard show tolerances on core diameter similar to those specified for 600 and 800-ft reels.
- 600-ft and 800-ft reels are not in use at this time. The specifications are provided so that a standard will be available should these reels come into use.