

# SMPTE RECOMMENDED PRACTICE

**RP 34-1998**

Revision of RP 34-1993

## Dimensions for 16-mm Motion-Picture Projector Reel Spindles



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### 1 Scope

This practice specifies the dimensions for 16-mm motion-picture projector reel spindles.

### 2 Normative reference

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

ANSI/SMPTE 235-1997, Motion-Picture Equipment (16-mm) — Projection Reels — 200- to 2300-Ft Capacity

### 3 Dimensions

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

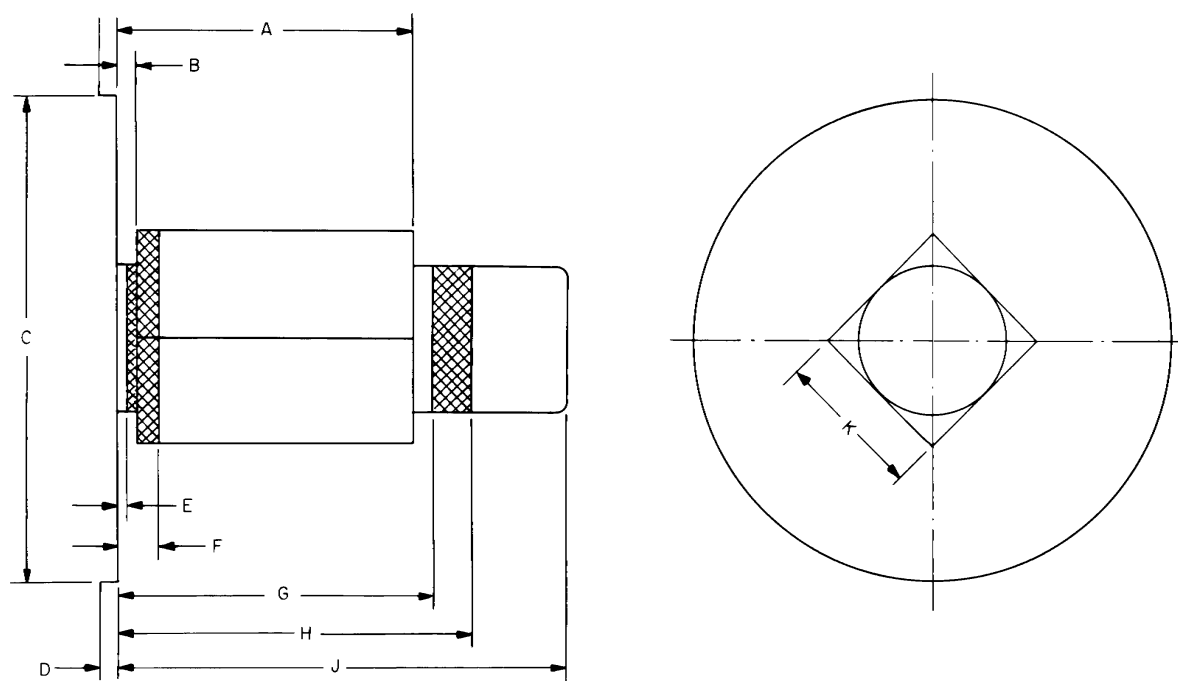
#### NOTES

1 Dimension K represents the diameter of the round portion or length of a side of the square drive portion of the spindle shaft, excluding locking means.

The figure illustrates the suggested construction for a projector spindle with a square drive portion. Alternate arrangements are also possible, providing that a minimum of two corners of the suggested square drive portion are maintained for drive and keying.

2 The areas between dimensions E and F and between dimensions G and H, illustrated by crosshatching in figure 1, represent the spindle shaft area, including a safety factor, on which the projection reel flange will rest. The minimum dimension K applies only to these areas, although the maximum dimension K applies to the entire shaft. The minimum shaft thickness dimension has been fixed for these areas to help minimize loose fit and resultant noise or tilt of reels.

3 The shape or action of the device for locking reels on spindles is optional, but the device should work against the full thickness of reels in the vicinity of the spindle holes, in accordance with ANSI/ SMPTE 235.



**Figure 1 – 16-mm projector reel spindles**

**Table 1 – Specifications**

Dimensions	Inches	Millimeters
A	0.100 min 0.665 max	2.54 min 16.89 max
B	0.010 max	0.25 max
C	0.63 min 0.97 max	16.0 min 24.6 max
D	0.12 min	3.0 min
E <sup>1)</sup>	0.005 max	0.13 max
F <sup>1)</sup>	0.080 min	2.03 min
G <sup>1)</sup>	0.710 max	18.03 max
H	0.850 min	21.59 min
J	0.980 min	24.89 min
K <sup>1)</sup>	0.310 min 0.315 max	7.87 min 8.00 max
<sup>1)</sup> See notes 1 and 2.		