

INTERNATIONAL
STANDARD

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**Cinematography — Cores for
motion-picture and magnetic film rolls —
Dimensions**

*Cinématographie — Noyaux pour films cinématographique
et magnétique — Dimensions*



Reference number
ISO 1039:1995(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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International Standard ISO 1039 was prepared by Technical Committee ISO/TC 36, *Cinematography*.

This third edition cancels and replaces the second edition (ISO 1039:1988), of which it constitutes a technical revision.

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Cinematography — Cores for motion-picture and magnetic film rolls — Dimensions

1 Scope

This International Standard specifies the sizes and dimensions of cores for motion-picture and magnetic film rolls.

2 Dimensions of cores

Cores for film of nominal width 8 mm, 16 mm, 17,5 mm, 35 mm, 65 mm and 70 mm shall be manufactured in accordance with the dimensions and tolerances specified in table 1 and figure 1. These cores shall be identified by numbers representing their nominal width and outside diameter in millimetres, for example 8 × 50.

NOTES

1 The dimensions in imperial units shown in figure 1 and in table 1 have been rounded to show acceptable practice. In a few such cases, the rounding direction differs from customary rules applied in converting millimetres to inches.

2 The direction and magnitude of the difference between the dimension *A* values in table 1 and the nominal width of

the cores has been fixed intentionally to encourage a common manufacturing practice of keeping the maximum widths of cores very slightly less than the minimum widths of corresponding films.

3 Means of attaching film to all cores are optional. Commonly used are cores having one anchoring slot or two anchoring slots angled in opposite directions. The latter facilitates film attachment whichever way the core is placed on its spindle. It is recommended that the edges of any slot, if used, be depressed slightly to minimize pressure marks in the first convolutions of the film.

4 The rather large tolerances on dimension *B* are necessary to encompass the satisfactory existing practices of many different manufacturers. It is expected, however, that cores made by any one manufacturer will be held to a considerably smaller tolerance range. This will help prevent large variations, including undue tapering of the core from one side to the other, of any manufacturer's products.

3 Drive holes in 35 × 125 cores

Cores designated as 35 × 125 shall have eight drive holes with dimensions and locations as shown in figure 2 and table 2.

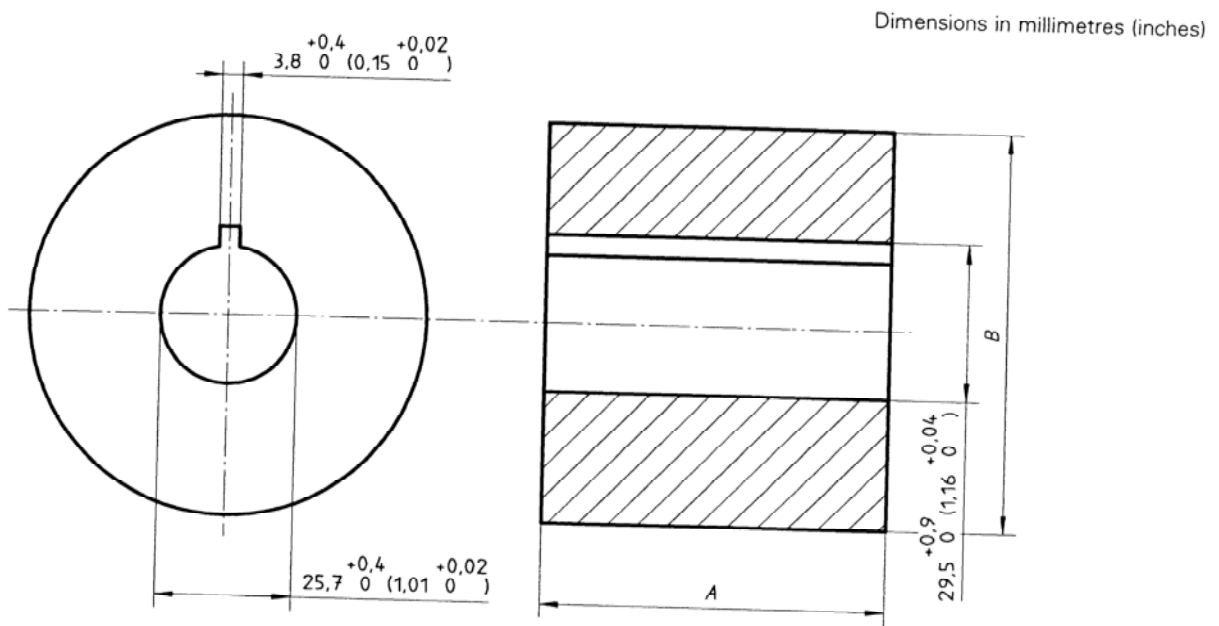


Figure 1 — Dimensions common to all cores

Table 1 — Variable dimensions of cores

Designation	Dimension	mm	in
8 × 50	A	7,9 $\begin{smallmatrix} 0 \\ -0,5 \end{smallmatrix}$	0,31 $\begin{smallmatrix} 0 \\ -0,02 \end{smallmatrix}$
	B	50,0 ± 0,5	1,97 ± 0,02
16 × 50	A	15,9 $\begin{smallmatrix} 0 \\ -0,5 \end{smallmatrix}$	0,62 $\begin{smallmatrix} 0 \\ -0,02 \end{smallmatrix}$
	B	50,0 ± 0,5	1,97 ± 0,02
16 × 75	A	15,9 $\begin{smallmatrix} 0 \\ -0,5 \end{smallmatrix}$	0,62 $\begin{smallmatrix} 0 \\ -0,02 \end{smallmatrix}$
	B	75,0 $\begin{smallmatrix} +2,0 \\ -1,0 \end{smallmatrix}$	2,95 $\begin{smallmatrix} +0,08 \\ -0,04 \end{smallmatrix}$
16 × 100	A	15,9 $\begin{smallmatrix} 0 \\ -0,5 \end{smallmatrix}$	0,62 $\begin{smallmatrix} 0 \\ -0,02 \end{smallmatrix}$
	B	100,0 ± 1,0	3,94 ± 0,04
17,5 × 100	A	17,4 $\begin{smallmatrix} 0 \\ -0,5 \end{smallmatrix}$	0,68 $\begin{smallmatrix} 0 \\ -0,02 \end{smallmatrix}$
	B	100,0 ± 1,0	3,94 ± 0,04
35 × 50	A	34,9 $\begin{smallmatrix} 0 \\ -1,0 \end{smallmatrix}$	1,37 $\begin{smallmatrix} 0 \\ -0,04 \end{smallmatrix}$
	B	50,0 ± 0,5	1,97 ± 0,02
35 × 75	A	34,9 $\begin{smallmatrix} 0 \\ -1,0 \end{smallmatrix}$	1,37 $\begin{smallmatrix} 0 \\ -0,04 \end{smallmatrix}$
	B	75,0 $\begin{smallmatrix} +2,0 \\ -1,0 \end{smallmatrix}$	2,95 $\begin{smallmatrix} +0,08 \\ -0,04 \end{smallmatrix}$
35 × 100	A	34,9 $\begin{smallmatrix} 0 \\ -1,0 \end{smallmatrix}$	1,37 $\begin{smallmatrix} 0 \\ -0,04 \end{smallmatrix}$
	B	100,0 ± 1,0	3,94 ± 0,04
35 × 125 ¹⁾	A	34,9 $\begin{smallmatrix} 0 \\ -1,0 \end{smallmatrix}$	1,37 $\begin{smallmatrix} 0 \\ -0,04 \end{smallmatrix}$
	B	125,0 ± 1,0	4,92 ± 0,04
65 × 75	A	64,9 $\begin{smallmatrix} 0 \\ -1,0 \end{smallmatrix}$	2,56 $\begin{smallmatrix} 0 \\ -0,04 \end{smallmatrix}$
	B	75,0 $\begin{smallmatrix} +2,0 \\ -1,0 \end{smallmatrix}$	2,95 $\begin{smallmatrix} +0,08 \\ -0,04 \end{smallmatrix}$
70 × 75	A	69,9 $\begin{smallmatrix} 0 \\ -1,0 \end{smallmatrix}$	2,75 $\begin{smallmatrix} 0 \\ -0,04 \end{smallmatrix}$
	B	75,0 $\begin{smallmatrix} +2,0 \\ -1,0 \end{smallmatrix}$	2,95 $\begin{smallmatrix} +0,08 \\ -0,04 \end{smallmatrix}$

1) See clause 3.

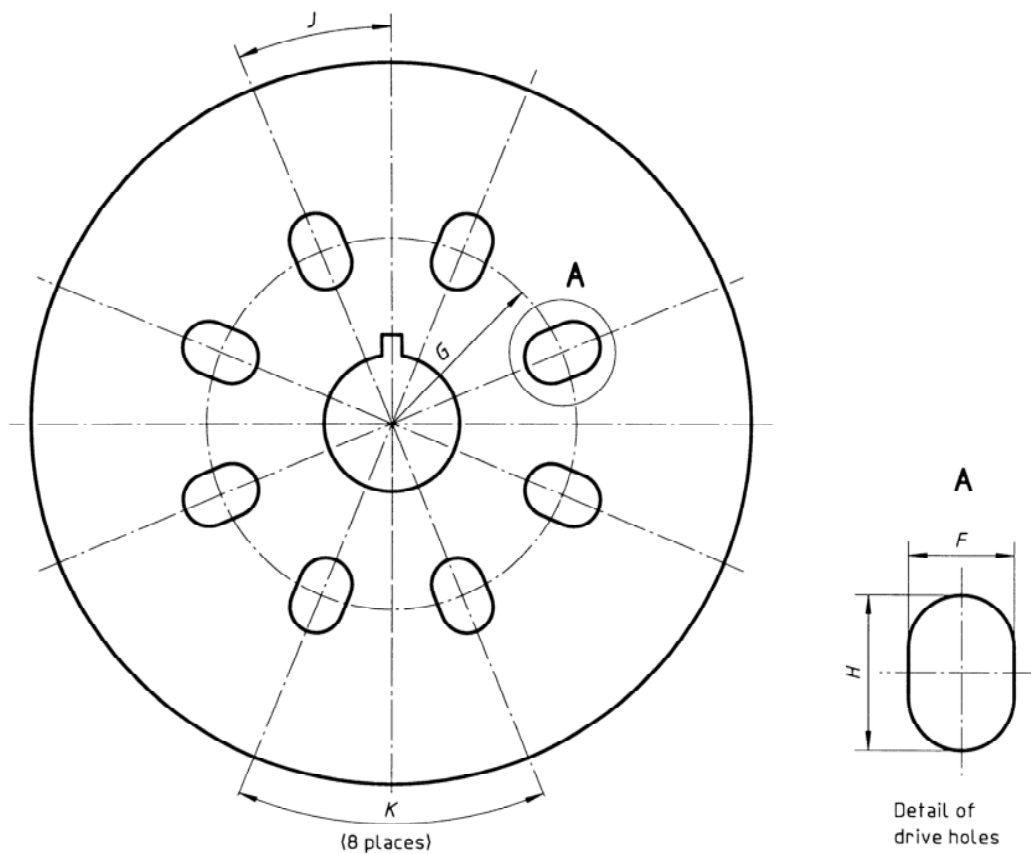


Figure 2 — Drive holes in 35 × 125 cores (see clause 3)

Table 2 — Drive hole dimensions

Dimension	mm	in
<i>F</i>	10,00 ± 0,50	0,394 ± 0,020
<i>G</i>	35,00 ± 0,50	1,378 ± 0,020
<i>H</i>	14,60 ± 0,50	0,575 ± 0,020
<i>J</i>	22,5°	22,5°
<i>K</i>	45°	45°

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Descriptors: cinematography, motion-picture film, roll films, bobbins, cores, dimensions.

Price based on 4 pages
