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

Cinématographie — Noyaux pour films cinématographique et magnétique — Dimensions

Reference number
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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

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

This second edition cancels and replaces the first edition (ISO 1039 : 1975), of which it constitutes a technical revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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

1 Scope and field of application

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

2 Dimensions of simple cores

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

3 Dimensions of intermediate cores

Intermediate cores for reducing spindle hole size of core 35 mm × 75 mm for film of nominal width 35 mm shall be manufactured in accordance with the dimensions and tolerances specified in figure 2. These cores shall be identified as 35 × 25 × 60; these numbers referring to the nominal film width, internal diameter and outside diameter in millimetres.

4 Dimensions of cores with light lock groove

Cores with light lock grooves and spring detents for film of nominal width 35 mm shall be manufactured in accordance with the dimensions and tolerances specified in figure 3. These cores shall be identified as 35 × 60 × 78; these numbers referring to the nominal film width, internal bore and outside diameter in millimetres.

NOTES TO CLAUSES 2, 3 AND 4

1 The dimensions in imperial units shown in figures 1, 2 and 3 and in the table have been rounded to show acceptable practice. In a few such cases, particularly in figure 3, 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 the table 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* for simple cores 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.

Dimensions in millimetres (inches)

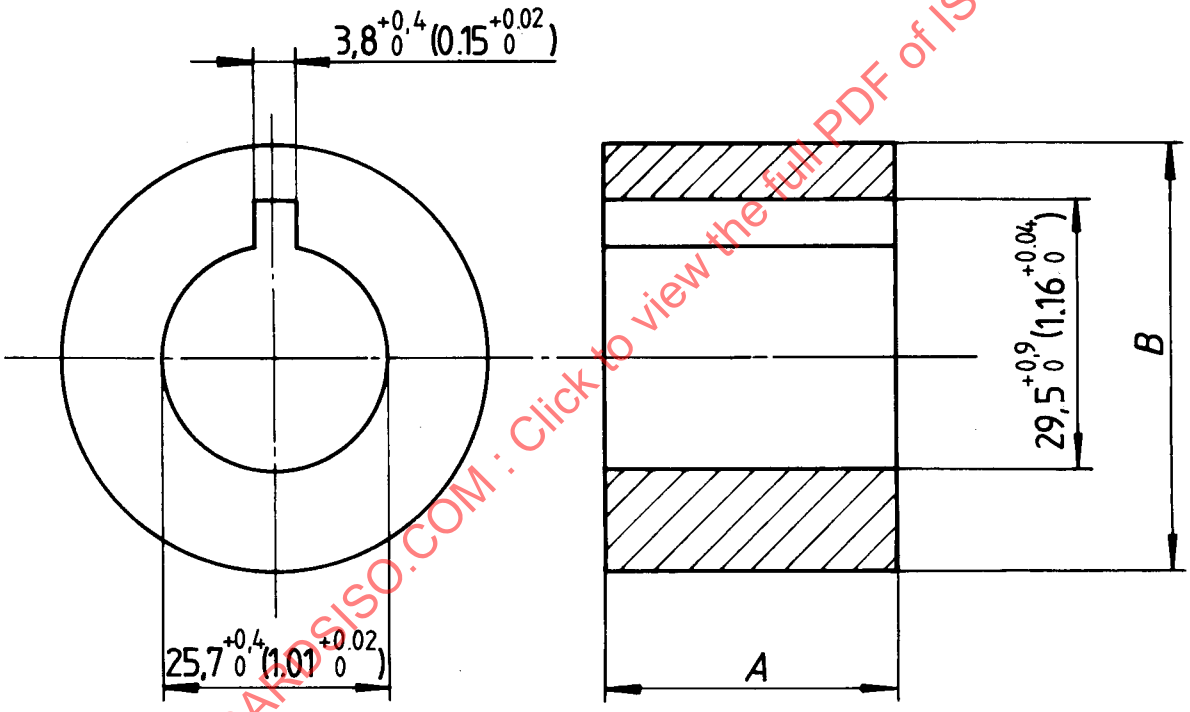

Figure 1 — Dimensions common to all simple cores

Table — Variable dimensions of simple cores

Designation	Dimension	mm	in
8 × 50	*A*	$7{,}9\ ^{0}_{-0{,}5}$	$0.31\ ^{0}_{-0.02}$
	B	50,0 ± 0,5	1.97 ± 0.02
16 × 50	*A*	$15{,}9\ ^{0}_{-0{,}5}$	$0.62\ ^{0}_{-0.02}$
	B	50,0 ± 0,5	1.97 ± 0.02
16 × 75	*A*	$15{,}9\ ^{0}_{-0{,}5}$	$0.62\ ^{0}_{-0.02}$
	B	$75{,}0\ ^{+2{,}0}_{-1{,}0}$	$2.95\ ^{+0.08}_{-0.04}$
16 × 100	*A*	$15{,}9\ ^{0}_{-0{,}5}$	$0.62\ ^{0}_{-0.02}$
	B	100,0 ± 1,0	3.94 ± 0.04
17,5 × 100	*A*	$17{,}4\ ^{0}_{-0{,}5}$	$0.68\ ^{0}_{-0.02}$
	B	100,0 ± 1,0	3.94 ± 0.04
35 × 50	*A*	$34{,}9\ ^{0}_{-1{,}0}$	$1.37\ ^{0}_{-0.04}$
	B	50,0 ± 0,5	1.97 ± 0.02
35 × 75	*A*	$34{,}9\ ^{0}_{-1{,}0}$	$1.37\ ^{0}_{-0.04}$
	B	$75{,}0\ ^{+2{,}0}_{-1{,}0}$	$2.95\ ^{+0.08}_{-0.04}$
35 × 100	*A*	$34{,}9\ ^{0}_{-1{,}0}$	$1.37\ ^{0}_{-0.04}$
	B	100,0 ± 1,0	3.94 ± 0.04
65 × 75	*A*	$64{,}9\ ^{0}_{-1{,}0}$	$2.56\ ^{0}_{-0.04}$
	B	$75{,}0\ ^{+2{,}0}_{-1{,}0}$	$2.95\ ^{+0.08}_{-0.04}$
70 × 75	*A*	$69{,}9\ ^{0}_{-1{,}0}$	$2.75\ ^{0}_{-0.04}$
	B	$75{,}0\ ^{+2{,}0}_{-1{,}0}$	$2.95\ ^{+0.08}_{-0.04}$

Dimensions in millimetres (inches)

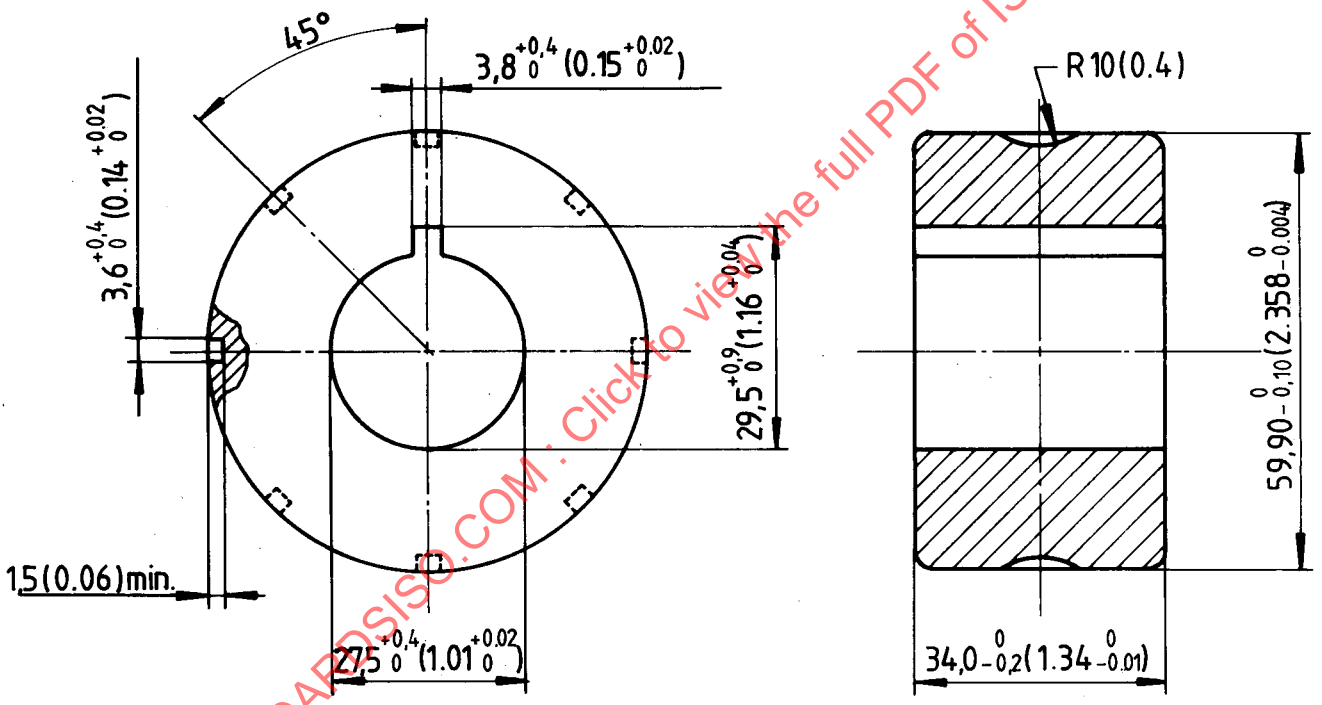

Figure 2 — Dimensions for intermediate cores