INTERNATIONAL STANDARD

ISO 93-2

Second edition
1999-05-01

Textile machinery and accessories — Cylindrical sliver cans —

Part 2:
Spring bottoms

Matériel pour l'industrie textile — Pots cylindriques pour rubans —

Partie 2: Fonds à ressort

Reference number
ISO 93-2:1999(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 93-2 was prepared by Technical Committee ISO/TC 72, *Textile machinery and machinery for dry-cleaning and industrial laundering*, Subcommittee SC 1, *Spinning preparatory, spinning, twisting and winding machinery and accessories*.

This second edition cancels and replaces the first edition (ISO 93-2:1978), which has been technically revised.

ISO 93 consists of the following parts under the general title *Textile machinery and accessories — Cylindrical sliver cans*:

— *Part 1: Main dimensions*

— *Part 2: Spring bottoms*

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Textile machinery and accessories — Cylindrical sliver cans —

Part 2:
Spring bottoms

1 Scope

This part of ISO 93 specifies the principal features of spring bottoms, with and without pre-tension, used in cylindrical sliver cans specified in ISO 93-1.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 93. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 93 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 93-1:1998, *Textile machinery and accessories — Cylindrical sliver cans — Part 1: Main dimensions.*

3 Symbols

d inside diameter of sliver can

d_4 outside diameter of spring plate

h height of sliver can

h_2 distance from top rim of can to surface of spring plate

h_3 depth of spring plate

F_n force of spring

F_v force of spring in top working position

L_0 length of unloaded spring

L_v length of spring in top working position (i.e. when constrained)

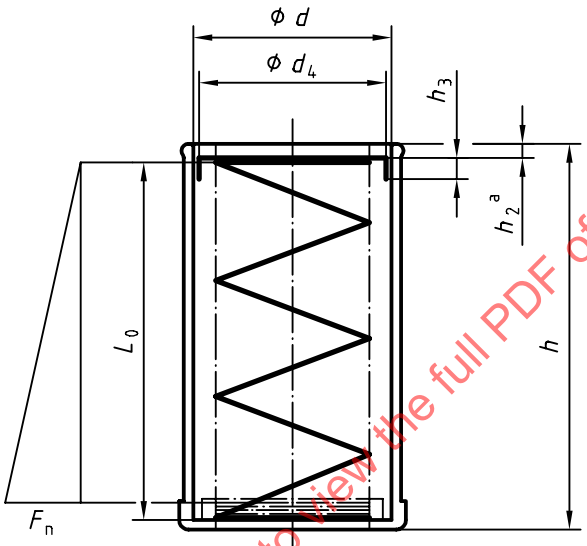
4 Principal features

4.1 Spring bottoms for cylindrical cans without castors

See Figures 1 and 2, and Table 1.

F_v as well as tolerances of parallelism of the spring plate shall be agreed between the producer, machine manufacturer and customer.

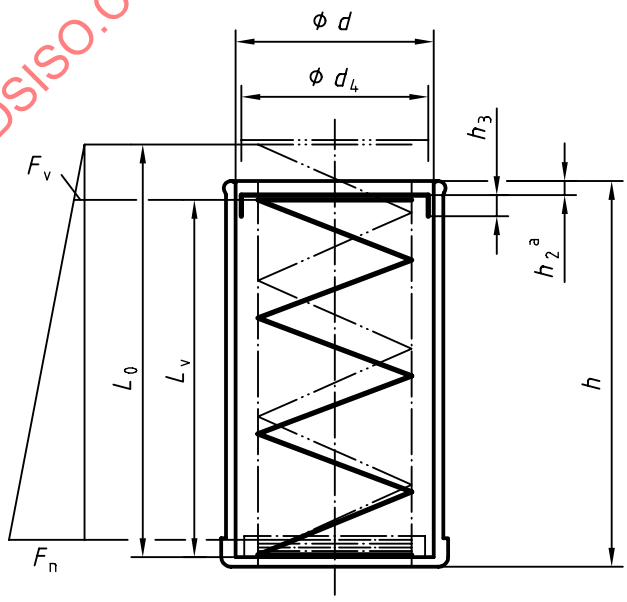
Dimensions in millimetres



a $5 \leqslant h_2 \leqslant 70$

Figure 1 — Spring bottom without pre-tension, type A

Dimensions in millimetres



a $h_2 = 20$

Figure 2 — Spring bottom with pre-tension, type B

Table 1 — Principal features of spring bottoms — Types A and B

Dimensions in millimetres

Size of can [a]		Characteristics of spring		Spring plate	
d ± 3	h	Type A $L_0 \pm 30$	Type B $L_0 \pm 30$	d_4	h_3
300	900	840	940	285	50
350				335	50
400				385	50
450				435	50
500				485	55
600				585	60
700				682	70
300	1 000	940	1 040	285	50
350				335	50
400				385	50
450				435	50
500				485	55
600				585	60
700				682	70
400	1 100	1 040	1 140	385	50
450				435	50
500				485	55
600				585	60
700				682	70
450	1 200 [c]	1 140	1 240	435	50
500				485	55
600				585	60
700 [b]				682	70

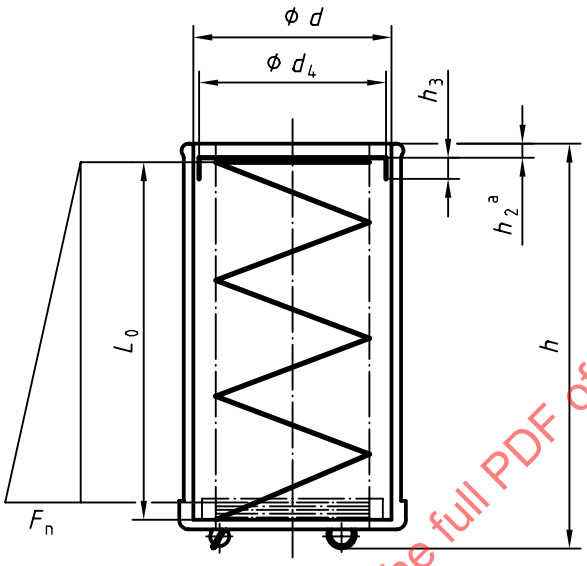
a See ISO 93-1.
b Diameters greater than 700 mm shall be in increments of 100 mm.
c Heights greater than 1 200 mm shall be in increments of 100 mm.

4.2 Spring bottoms for cylindrical cans with castors

See Figures 3 and 4, and Table 2.

F_v as well as tolerances of parallelism of the spring plate shall be agreed between the producer, machine manufacturer and customer.

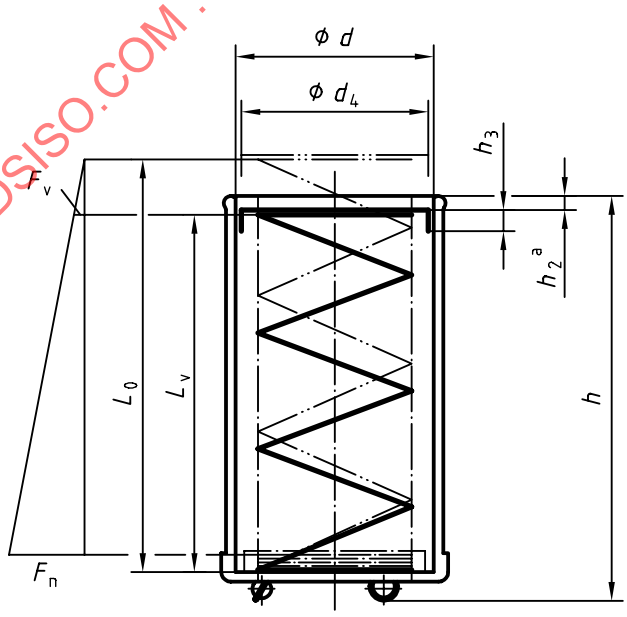
Dimensions in millimetres



a $5 \leqslant h_2 \leqslant 70$

Figure 3 — Spring bottom without pre-tension, type C

Dimensions in millimetres



a $h_2 = 20$

Figure 4 — Spring bottom with pre-tension, type D