INTERNATIONAL STANDARD

ISO 8116-6

Second edition
1995-09-15

Textile machinery and accessories — Beams for winding —

Part 6:
Beams for ribbon weaving and ribbon knitting

Matériel pour l'industrie textile — Ensouples pour enroulement —
Partie 6: Ensouples pour rubans tissés et rubans tricotés

Reference number
ISO 8116-6:1995(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.

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 8116-6 was prepared by Technical Committee ISO/TC 72, *Textile machinery and allied machinery and accessories*, Subcommittee SC 2, *Winding and preparatory machinery for fabric manufacture*.

This second edition cancels and replaces the first edition (ISO 8116-6:1990), which has been technically revised.

ISO 8116 consists of the following parts, under the general title *Textile machinery and accessories — Beams for winding*:

— *Part 1: General vocabulary*

— *Part 2: Warper's beams*

— *Part 3: Weaver's beams*

— *Part 4: Quality classification of flanges for weaver's beams, warper's beams and sectional beams*

— *Part 5: Sectional beams for warp knitting machines*

— *Part 6: Beams for ribbon weaving and ribbon knitting*

— *Part 7: Beams for dyeing slivers, rovings and yarns*

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— *Part 8: Definitions of run-out tolerances and methods of measurement*

— *Part 9: Dyeing beams for textile fabrics*

Annex A of this part of ISO 8116 is for information only.

Textile machinery and accessories — Beams for winding —

Part 6:
Beams for ribbon weaving and ribbon knitting

1 Scope

This part of ISO 8116 defines the basic terms and designation and lays down the main dimensions as well as the variation of form and position for beams for ribbon weaving and ribbon knitting.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8116. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8116 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 286-2:1988, *ISO system of limits and fits — Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts.*

ISO 2768-1:1989, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications.*

ISO 8116-4:1995, *Textile machinery and accessories — Beams for winding — Part 4: Quality classification of flanges for weaver's beams, warper's beams and sectional beams.*

ISO 8116-8:1995, *Textile machinery and accessories — Beams for winding — Part 8: Definitions of run-out tolerances and methods of measurement.*

3 Types of beam with coordination of the quality classes for flanges

(See table 1)

Table 1 — Types of beams with coordination of the quality classes for flanges

Type	Mounting	Brake	Quality class of flanges in accordance with ISO 8116-4			
			1	2	3	4
A	With shaft	Flange with slot for brake band	—	X	X	X
B	With bore					
C	With shaft	Additional disc brake	X	X	X	X
D	With bore					

4 Terminology and main dimensions

(See figures 1 to 4 and tables 2 and 3)

d_1 flange diameter

d_2 barrel diameter

d_3 shaft diameter

d_4 bore diameter

l_1 width between flanges

l_2 overall length (without shafts)

l_3 length of shaft

n_1 distance between slotted holes

n_2 length of driving slot

n_3 width of driving slot

s_1 thickness of flange

s_2 width of brake groove

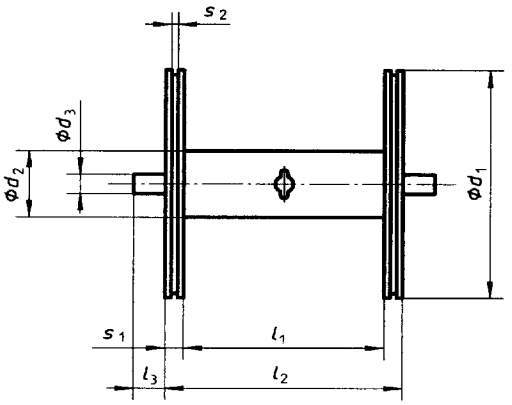
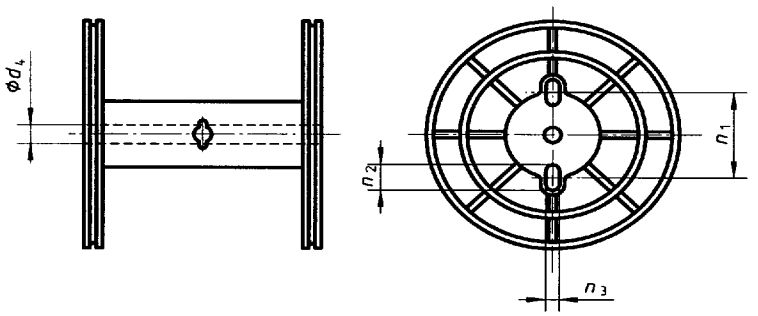


Figure 1 — Beams for ribbon weaving and ribbon knitting — Type A



NOTE — The other dimensions are given in figure 1.

Figure 2 — Beams for ribbon weaving and ribbon knitting — Type B

Table 2 — Main dimensions of beams for ribbon weaving and ribbon knitting — Types A and B

Dimensions in millimetres

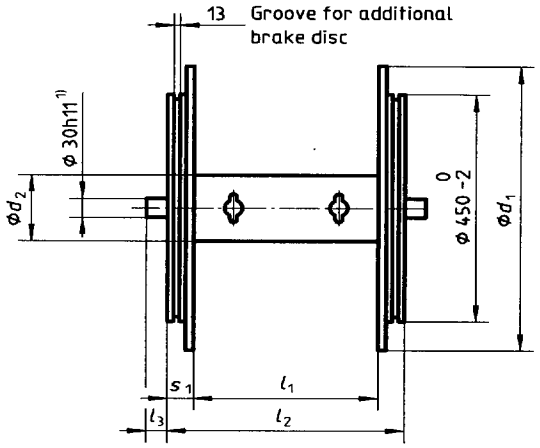
d_1 [1]	d_2	d_3 $^{0}_{-0,15}$	d_4 H11 [2]	s_1 max.	s_2	n_1	n_2	n_3	l_1	l_2 $^{0}_{-1}$	l_3
(130)	40	20	13	10	4	42	12,5	8			
				11	5						
160	50	20	13	12	6	52,5	15,5	9			
				13	6						
200	60	20	13	13	6,5	67,5	22,5	9		75	
				14	6,5						
(220)	60	20	13	13	6,5	74	34	9		140	
				14	6,5	62,5	22,5				
240	70	20	13	14	7	88,5	26,5	11	$l_2 - 2s_1$	190	30
				15	8						
300	80	—	17	17	8,5	86,5	28,5	11		300	
				18	8,5			12			
350	100	—	17	20	8,5	87,5	32,5	13		400	
	120			22		88,5	33,5				
400	110	—	17	22	8,5	96,5	41,5	13			
	120			25	10	97,5	42,5				
450	120	—	17	25	8,5	95	35	13			
	150			30	10	118	58				
500	150	—	17	30	10	117	57	16			
	180			35		121	61				

NOTE — General tolerances which are not specified: **ISO 2768-m** (see ISO 2768-1).

1) Dimensions shown in parentheses should be avoided for new constructions.

2) See ISO 286-2.

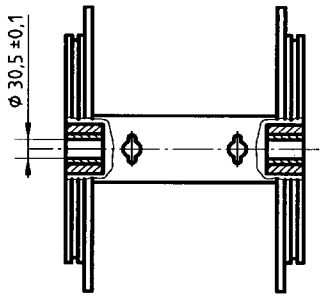
Dimensions in millimetres



1) See ISO 286-2.

Figure 3 — Beams for ribbon weaving and ribbon knitting — Type C

Dimensions in millimetres



NOTE — The other dimensions are given in figure 3.

Figure 4 — Beams for ribbon weaving and ribbon knitting — Type D

Table 3 — Dimensions of beams for ribbon weaving and ribbon knitting — Types C and D

Dimensions in millimetres

d_1	d_2 min.	s_1	l_1	l_2 $^{0}_{-1}$	l_3
600	150	35	$l_2 - 2s_1$	400 500 640	40
	170				
	190				
700	150	35			
	170	40			
	220				
800	150	40			
	190	45			
	220				
	295				

NOTE — General tolerances which are not specified: **ISO 2768-m** (see ISO 2768-1).

5 Circular axial run-out tolerance, T_a, of flanges

The permissible circular axial run-out tolerance of flanges, T_a, is 0,5 mm. The run-out shall be measured in accordance with ISO 8116-8.

6 Total run-out tolerance, T_r, of the barrel

The permissible total run-out tolerance of the barrel, T_r, is 0,5 mm. The run-out shall be measured in accordance with ISO 8116-8.

7 Material

The flanges and barrel shall be made of light metal.

8 Execution

The inside of the flanges and the surface of the barrel shall be smooth and anodized.

NOTE 1 Beams for ribbon weaving and ribbon knitting can be combined with flanges complying with ISO 8116-3 and ISO 8116-5, and barrels (lengths and diameters) complying with this part of ISO 8116.

9 Designation

The designation of beams for ribbon weaving and knitting in accordance with this part of ISO 8116 shall include the following information in the order given:

a) "Beam";

b) reference to this part of ISO 8116, i.e. ISO 8116-6;

c) the type of beam (A, B, C or D);

d) the flange diameter, d_1, in millimetres;

e) the barrel diameter, d_2, in millimetres;

f) the thickness of flanges, s_1, in millimetres;

g) the overall length, l_2, in millimetres.

EXAMPLE

A beam for ribbon weaving and ribbon knitting, type B, with flange diameter d_1 of 400 mm, barrel diameter d_2 of 110 mm, thickness of flange s_1 of 22 mm and overall length l_2 of 300 mm shall be designated as follows:

Beam ISO 8116-6 — B 400 × 110 × 22 × 300

Annex A
(informative)

Bibliography

[1] ISO 8116-3:1995, *Textile machinery and accessories — Beams for winding — Part 3: Weaver's beams.*

[2] ISO 8116-5:1995, *Textile machinery and accessories — Beams for winding — Part 5: Sectional beams for warp knitting machines.*

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Descriptors: textile machinery, winding, tapes, beams (textile machinery), basic concepts, dimensions, run-out tolerances, designation.

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