

# INTERNATIONAL STANDARD

**ISO**  
**8116-6**

First edition  
1990-07-01

---

---

## **Textile machinery and accessories — Beams for winding —**

### **Part 6:**

**Beams for ribbon weaving and ribbon  
knitting — Terminology and main dimensions**

*Matériel pour l'industrie textile — Ensembles pour enroulement —*

*Partie 6: Ensembles pour rubans tissés et rubans tricotés — Terminologie  
et dimensions principales*



Reference number  
ISO 8116-6:1990(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*.

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

- *Part 1: Vocabulary*
- *Part 2: Warper's beams — Terminology and main dimensions*
- *Part 3: Weaver's beams — Terminology and main dimensions*
- *Part 4: Quality classification of flanges for weaver's beams, warper's beams and sectional beams*
- *Part 5: Sectional beams for warp knitting machines — Terminology and main dimensions*
- *Part 6: Beams for ribbon weaving and ribbon knitting — Terminology and main dimensions*
- *Part 9: Dyeing beams for textile fabrics — Terminology and main dimensions*

© ISO 1990

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

## Textile machinery and accessories — Beams for winding —

### Part 6:

### Beams for ribbon weaving and ribbon knitting — Terminology and main dimensions

#### 1 Scope

This part of ISO 8116 defines the basic terms 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 2013:1983, *Textile machinery and accessories — Beams — Method of measuring variations of form and position.*

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

ISO 8116-3:1986, *Textile machinery and accessories — Beams for winding — Part 3: Weaver's beams — Terminology and main dimensions.*

ISO 8116-4:1985, *Textile machinery and accessories — Beams for winding — Part 4: Quality classification of flanges for weaver's beams, warper's beams and sectional beams.*

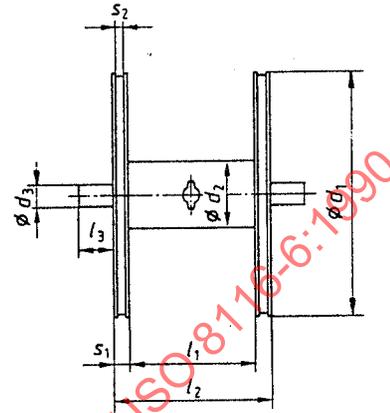
ISO 8116-5:1988, *Textile machinery and accessories — Beams for winding — Part 5: Sectional beams for warp knitting machines — Terminology and main dimensions.*

### 3 Types of beams 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	Braking	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					



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

### 4 Terminology and main dimensions

$d_1$  = flange diameter

$d_2$  = barrel diameter

$d_3$  = diameter of shaft

$d_4$  = diameter of bore

$l_1$  = width between flanges

$l_2$  = overall length (without shafts)

$l_3$  = length of extension of shaft

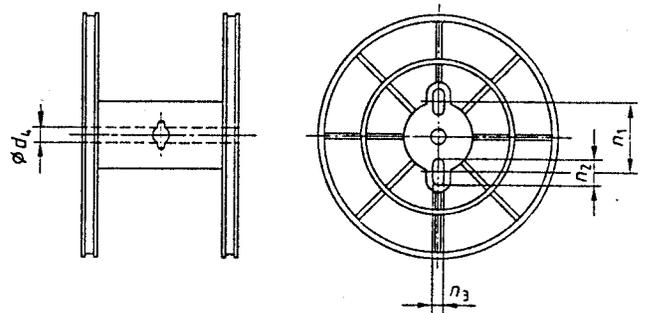
$n_1$  = distance between slotted holes

$n_2$  = length of driving slot

$n_3$  = width of driving slot

$s_1$  = thickness of flange

$s_2$  = width of brake groove



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

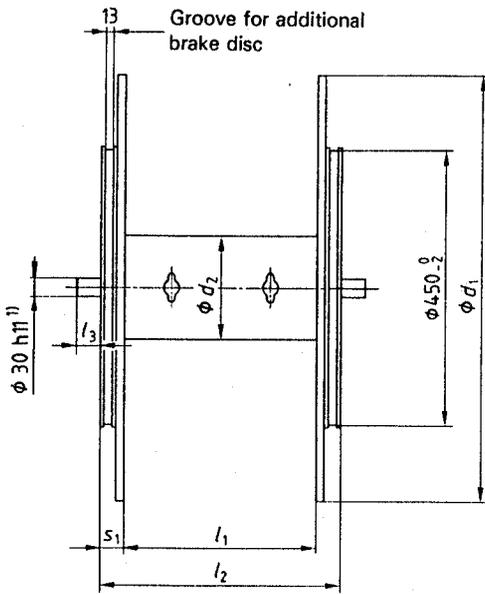
Values in millimetres

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

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.

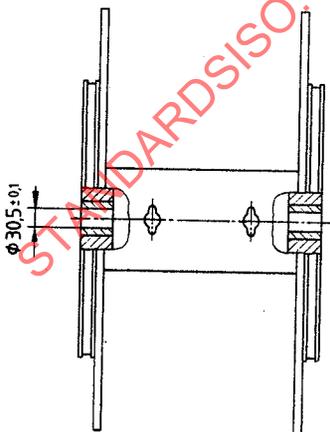
Dimensions in millimetres



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

Values 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	40
	170				
	190				
700	150	40	$l_2 - 2s_1$	500	40
	170				
	220				
800	150	45	$l_2 - 2s_1$	640	40
	190				
	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 circular axial run-out tolerance of flanges,  $T_a$ , is 0,5 mm. The run-out shall be measured in accordance with ISO 2013.

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

The total run-out tolerance of the barrel,  $T_r$ , is 0,5 mm. The run-out shall be measured in accordance with ISO 2013.

### 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