INTERNATIONAL STANDARD

ISO 14856

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Timekeeping instruments — Wristwatch-cases — Fixing dimensions of non-spring-bar types

Instruments horaires — Boîtes de montres-bracelets — Dimensions de fixation des types sans barrette

Reference number
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Foreword

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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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14856 was prepared by Technical Committee ISO/TC 114, *Horology*, Subcommittee SC 7, *Overall dimensions*.

Timekeeping instruments — Wristwatch-cases — Fixing dimensions of non-spring-bar types

1 Scope

This International Standard specifies overall fixing dimensions of wristwatch-cases to which bracelets or straps are fastened by means of a set of fixing pins and tubes.

This International Standard is applicable to wristwatch-cases with four or with two lugs.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents 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 286-1, *ISO system of limits and fits — Part 1: Bases of tolerances, deviations and fits*.

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

ISO 3765, *Timekeeping instruments — Wristwatches — Dimensions of bracelet-to-case fastening elements*

ISO 6426-2:1984, *Horological vocabulary — Part 2: Technico-commercial definitions*.

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 6426-2 and the following apply.

3.1
lug
part of a case to which a bracelet or a strap is fastened for attaching the watch to the wrist

3.2
lug hole
aperture made in a lug for fastening a bracelet or a strap to a case

3.3
distance between lugs
inner dimension A for cases of Type 1, as shown in Figure 1 and as specified in ISO 3765

3.4
lug width
outer dimensions a for cases of Type 2, as shown in Figure 2

4 Classification

Wristwatch-cases are classified in two types, as follows.

Type 1: a case with four lugs arranged in pairs on each side at the 6 h – 12 h axis (see Figure 1). A bracelet is fastened between these lugs by the use of a fixing pin and tube.

Type 2: a case with one single lug at 6 h and one at 12 h (see Figure 2). A bracelet is fastened by the use of a fixing pin and tube.

5 Forms of fastening elements

See Figures 1 and 2.

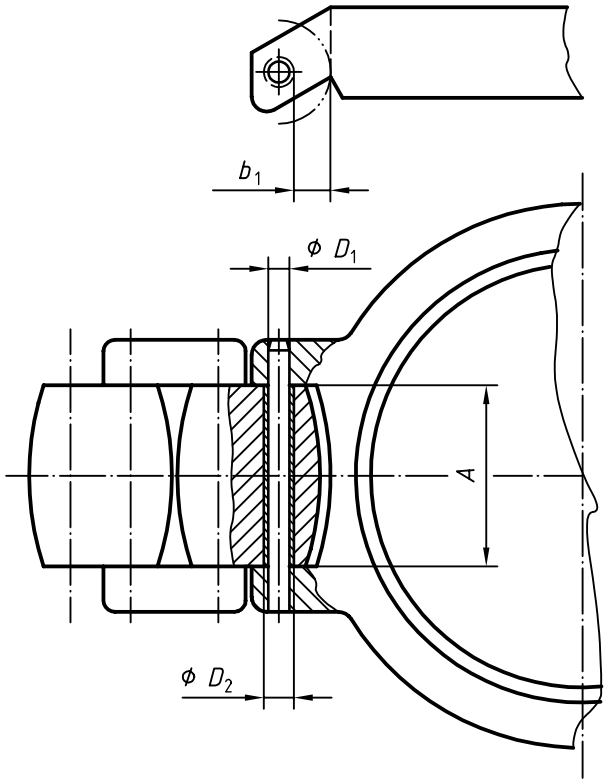

Figure 1 — Case with two pairs of lugs (Type 1)

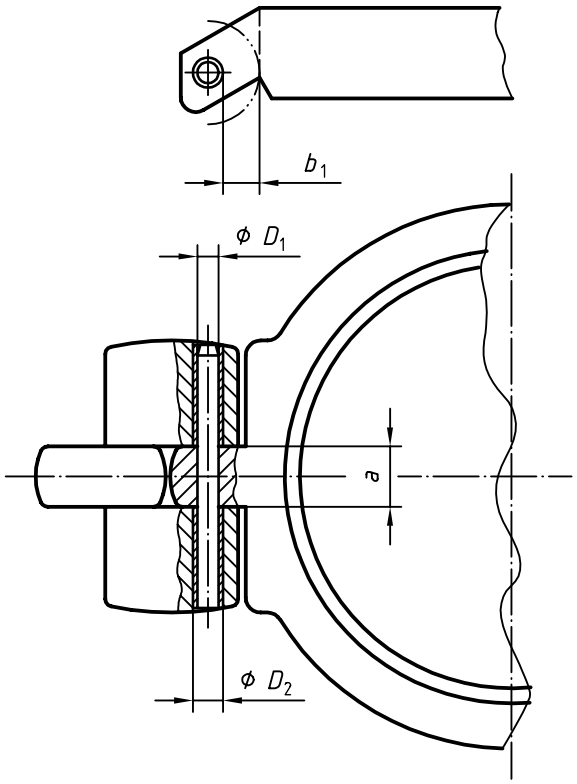

Figure 2 — Case with two single lugs (Type 2)

6 Forms of fastening pins and tubes

See Figures 3 and 4.

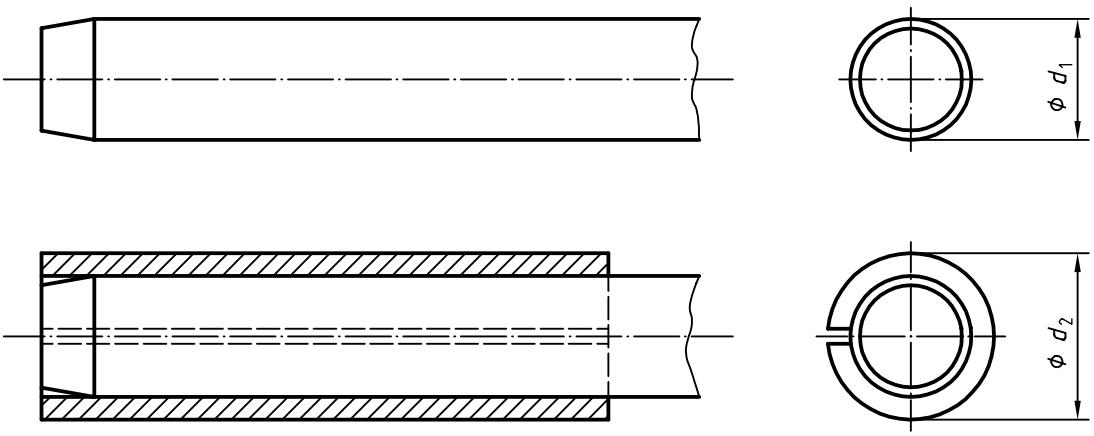

Figure 3 — Fastening pin and slit tube

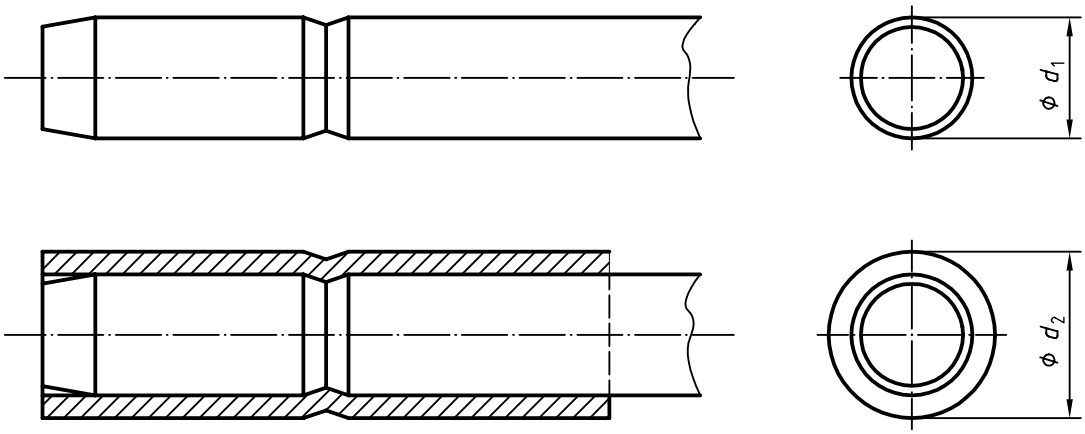

Figure 4 — Fastening notched pin and tube

7 Fixing dimensions and tolerances of wristwatch-cases, pins and tubes

Fixing dimensions are given in Tables 1 to 3, together with tolerances in accordance with ISO 286-1 and ISO 286-2.

Table 1 — Cases of Type 1 — Fixing dimensions and tolerances

Dimensions in millimetres

Distance[a] between lugs A	Diameter of lug hole D_1	Diameter of hole for passage of tube for slit or notched tubes D_2	Fastening pin clearance b_1
Tolerance			
H12 or H13	H11	H11	H15
5	$d_1 + 0{,}05$	$d_2 + 0{,}05$	0,70
6			
7			
8			1,10
9			
10*			
11			1,50
12*			
13			
14*			
15			
16*			2,00
17			
18*			
19			
20*			
21			
22			
24			

NOTE If A (distance between lugs) is less than 5 mm, a (lug width) (see Table 2) should be used by keeping the tolerance for A (H12 or H13).

[a] Preference should be given to the dimensions marked with an asterisk.

Table 2 — Cases of Type 2 — Fixing dimensions and tolerances

Dimensions in millimetres

Lug width a	Diameter of lug hole D_1	Diameter of hole for passage of tube for slit or notched tubes D_2	Fastening pin clearance b_1
Tolerance			
h12 or h13	H11	H11	H15
1,60	$d_1 + 0{,}05$	$d_2 + 0{,}05$	0,70
1,80			
2,00			1,10
2,20			1,50
2,50			
3,00			2,00
3,20			
3,50			
4,00			

NOTE If a (lug width) is more than 4 mm, A (distance between lugs) (see Table 1) should be used by keeping the tolerance for a (h12 or h13).

Table 3 — Assembly — Dimensions of fastening pins and tubes

Dimensions in millimetres

Fastening pin diameter[a] d_1	Outside diameter of tubes[a] (Driven-in pin) d_2	
	Slit tubes	Notched tubes
Tolerance		
h8 or h9	js11	js10
0,70*		1,00*
0,80	1,10	1,10
0,90*	1,20*	1,20*
1,00	1,30	1,30
1,10	1,40	1,40
		1,50
1,20*	1,50	1,50*
1,30	1,60	1,60
1,40*	1,70	1,80*
1,50*	1,80	1,90*
1,60	1,90	2,00

[a] Preference should be given to the dimensions marked with an asterisk.

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