

---

---

**Mineral and sapphire watch-glasses —  
Part 1:  
Dimensions and tolerances**

*Verres de montres minéraux et en saphir —*

*Partie 1: Dimensions et tolérances*

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

[ISO 14368-1:2000](https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00a3fc967e8f/iso-14368-1-2000)

<https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00a3fc967e8f/iso-14368-1-2000>



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 14368-1:2000

<https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00a3fc967e8f/iso-14368-1-2000>

© ISO 2000

All rights reserved. Unless otherwise specified, 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 either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 734 10 79  
E-mail [copyright@iso.ch](mailto:copyright@iso.ch)  
Web [www.iso.ch](http://www.iso.ch)

Printed in Switzerland

## 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.

Attention is drawn to the possibility that some of the elements of this part of ISO 14368 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14368-1 was prepared by Technical Committee ISO/TC 114, *Horology*, Subcommittee SC 13, *Watch-glasses*.

ISO 14368 consists of the following parts, under the general title *Mineral and sapphire watch-glasses*:

- *Part 1: Dimensions and tolerances* ([standards.iteh.ai](https://standards.iteh.ai))
- *Part 2: Assembly to the case by adhesive or using a gasket*
- *Part 3: Qualitative criteria and test methods*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 14368-1:2000

<https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00a3fc967e8f/iso-14368-1-2000>

# Mineral and sapphire watch-glasses —

## Part 1: Dimensions and tolerances

### 1 Scope

This part of ISO 14368 specifies the dimensions and tolerances of mineral and sapphire watch-glasses. It is applicable to round, flat watch-glasses, typically of diameter 8 mm to 35 mm.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 14368. 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 14368 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.*  
<https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00e369672878/iso-14368-1-2000>

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

### 3 Terms, definitions and symbols

#### 3.1 Terms and definitions

For the purposes of this part of ISO 14368, the terms and definitions given in ISO 286-1 and in ISO 286-2 apply.

#### 3.2 Symbols

See Figure 1.

- $d$  diameter of the glass
- $h_1$  cylindrical side height of the glass
- $h_2$  height of the lower slope of the glass
- $h_3$  height of the upper slope of the glass
- $h_4$  determining height for glasses assembled with adhesive
- $t$  total thickness of the glass
- $\beta$  angle of the lower slope of the glass

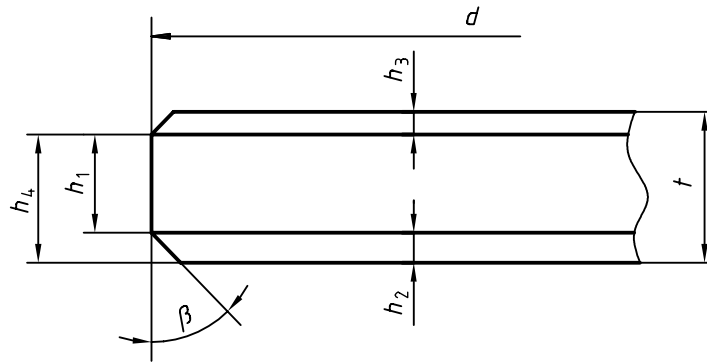


Figure 1 — Details of symbols

#### 4 Dimensions

The dimensions shall be as given in Tables 1 and 2.

For glasses assembled with adhesive, the lower slope height  $h_2$  shall be 0,10 mm provided that height  $h_4$  is no less than  $t/2 [h_4 = (h_2 + h_1) \text{ or } h_4 = (t - h_3)]$ .

For glasses assembled with a gasket, the lower slope height  $h_2$  shall be between 0,15 mm and 0,40 mm inclusive, in steps of 0,05 mm, provided that the cylindrical side height of the glass  $h_1$  is no less than  $t/2 [h_1 = t - (h_2 + h_3)]$ .

The cylindrical side height of the glass,  $h_1$ , is a determining factor for glasses assembled with a gasket.

The lower slope angle  $\beta$  of the glass will have the following values:

- for glasses assembled with adhesive,  $\beta = 45^\circ$  [ISO 14368-1:2000](https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00a36967e8f/iso-14368-1-2000)
- for glasses assembled with a gasket,  $35^\circ \leq \beta \leq 40^\circ$ .

Table 1 — Thickness and diameter of glass

Dimensions in millimetres

$t$	$d$
From 0,60 to 1,60 in 0,10 mm steps	From 8,0 to 35,0 in 0,50 mm steps

Table 2 — Tolerances

Dimensions in millimetres  
Tolerances in micrometres

Glasses assembled with adhesive				Glasses assembled with a gasket			
$t$		$d$		$t$		$d$	
0,6 to 1,0	js13 ( $\pm 70$ )	8,0 to 10,0	js10 ( $\pm 29$ )	0,6 to 1,0	js13 ( $\pm 70$ )	8,0 to 10,0	js9 ( $\pm 18$ )
		10,5 to 18,0	js9,5 ( $\pm 28$ )			10,5 to 18,0	js9 ( $\pm 21$ )
> 1,0	js13,5 ( $\pm 98$ )	18,5 to 30,0	js9 ( $\pm 26$ )	> 1,0	js13,5 ( $\pm 98$ )	18,5 to 30,0	js8,5 ( $\pm 21$ )
		> 30,5	js9 ( $\pm 31$ )			> 30,5	js8 ( $\pm 19$ )

NOTE 1 The values of the tolerances are in accordance with ISO 286-1 and ISO 286-2.

NOTE 2 In certain cases, the tolerances defined for glasses assembled with adhesive may apply to glasses assembled with a gasket.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 14368-1:2000

<https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00a3fc967e8f/iso-14368-1-2000>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 14368-1:2000

<https://standards.iteh.ai/catalog/standards/sist/cb1f59f1-c365-40a5-a1da-00a3fc967e8f/iso-14368-1-2000>

---

---

**ICS 39.040.10**

Price based on 2 pages