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**Timekeeping instruments — Crowns  
and sealed tubes — Designs and  
dimensions**

*Instruments horaires — Couronnes et tubes étanches — Constructions  
et dimensions*



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## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 114, *Horology*, Subcommittee SC 7, *Overall dimensions*.

This third edition cancels and replaces the second edition (ISO 10552:2012), which has been technically revised.

# Timekeeping instruments — Crowns and sealed tubes — Designs and dimensions

## 1 Scope

This International Standard specifies designs and dimensions of crowns and sealed tubes and their tolerances.

This International Standard is applicable to crowns and sealed tubes of mechanical, electromechanical, and electronic wristwatches of water-resistant designs.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 286-1, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 1: Basis of tolerances, deviations and fits*

ISO 6426-2, *Horological vocabulary — Part 2: Technical and commercial definitions*

ISO 22810, *Horology — Water-resistant watches*

## 3 Terms and definitions

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

## 4 Symbols

### 4.1 Crowns

- $D_1$  outer diameter of the crown (types 1, 2, and 3)
- $D_2$  diameter of the thread (types 1, 2, and 3)
- $D_3$  diameter of the crown hub (types 1, 2, and 3)
- $D_4$  countersink reaming diameter for water-resistant tube into the crown (types 1, 2, and 3)
- $C$  height of the knurled surface (types 1, 2, and 3)
- $F_1$  protrusion of the crown hub (types 1 and 3)
- $F_2$  sinking of the crown hub (type 2)
- $F_3$  positional dimension of the groove (type 3)
- $H$  height of the crown (types 1, 2, and 3)
- $P_1$  countersink depth of crown for water-resistant tube (types 1, 2, and 3)
- $P_2$  the tapped part shall be at least three threads long (types 1, 2, and 3)