
**Collets for tool holders with taper
ratio 1:10 — Collets, holders, nuts**

*Pinces de serrage pour mandrins à conicité 1:10 — Pinces, mandrins
à pinces, écrous de serrage*

Sample Document

get full document from standards.iteh.ai



Reference number
ISO 10897:2016(E)

© ISO 2016

Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Dimensions	1
3.1 General.....	1
3.2 Collet.....	1
3.3 Holder.....	3
3.4 Nut.....	4
3.5 Collet run-out tolerances.....	5
4 Material	6
4.1 Collet.....	6
4.2 Nut.....	6
5 Manufacturing requirements	7
5.1 Collet.....	7
5.2 Holder.....	7
5.3 Nut.....	7
6 Designation	7
6.1 Collet.....	7
6.2 Holder.....	7
6.3 Nut.....	8
6.4 Test mandrel.....	8
7 Marking	8
8 Operational set up	8
Annex A (normative) Cone angle tolerances AT3 and AT4	10
Annex B (informative) Relationship between designations in ISO 10897 and ISO 13399	11
Bibliography	12

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 29, *Small tools*, Subcommittee SC 2, *Holding tools, adaptive items and interfaces*.

This second edition cancels and replaces the first edition (ISO 10897:1996), of which it constitutes a minor revision with the addition of [Annex B](#), showing the relationship between the symbols in this International Standard and the symbols in the ISO 13399 series.

Collets for tool holders with taper ratio 1:10 — Collets, holders, nuts

1 Scope

This International Standard specifies the dimensions, materials and manufacturing requirements, and designation of collets for tools with cylindrical shanks and their corresponding holders and nuts. For non-standardized clamping devices, such as clamping devices specified in drawings, these holders can be agreed upon between customer and supplier.

Form A applies where a clamping range of H10 is sufficient.

Form B can be used for any application without lateral cutting load.

[Annex A](#) specifies the values for AT3 tolerance and AT4 tolerance.

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

3 Dimensions

3.1 General

All dimensions and tolerances are given in millimetres. Tolerances not specified shall be of tolerance class “m” in accordance with ISO 2768-1.

3.2 Collet

The dimensions of the collet shall be in accordance with the dimensions shown in [Figure 1](#) and [Figure 2](#) and given in [Table 1](#).