
**Machine tools — Connecting dimensions
of spindle noses and work holding
chucks —**

**Part 3:
Bayonet type**

iTeh STANDARD PREVIEW
*Machines-outils — Dimensions d'assemblage des nez de broches et
des mandrins porte-pièces —
(standards.iteh.ai)
Partie 3: Type baïonnette*

ISO 702-3:2007

<https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007>



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 702-3:2007](https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007)

<https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2007

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 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Interchangeability	1
3 Sizes for interchangeability	2
3.1 Spindle noses	2
3.2 Bayonet disc	4
3.3 Face plates	6
3.4 Studs with nuts and collars	8
Bibliography	10

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 702-3:2007](https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007)

<https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007>

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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 702-3 was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 8, *Work holding spindles and chucks*.

This second edition cancels and replaces the first edition (ISO 702-3:1975), of which all the clauses, tables and figures have been technically revised.

ISO 702 consists of the following parts, under the general title *Machine tools — Connecting dimensions of spindle noses and work holding chucks*:

- *Part 1: Conical connection*
- *Part 2: Camlock type*
- *Part 3: Bayonet type*
- *Part 4: Cylindrical connection*

iTeh STANDARD PREVIEW
(standards.iteh.ai)
<https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007>

Machine tools — Connecting dimensions of spindle noses and work holding chucks —

Part 3: Bayonet type

1 Scope

This part of ISO 702 specifies the sizes for interchangeability of bayonet-type lathe spindle noses and corresponding face plates.

NOTE The “conical connection”, “camlock type” and “cylindrical connection” are dealt with in ISO 702-1, ISO 702-2 and ISO 702-4, respectively.

2 Interchangeability

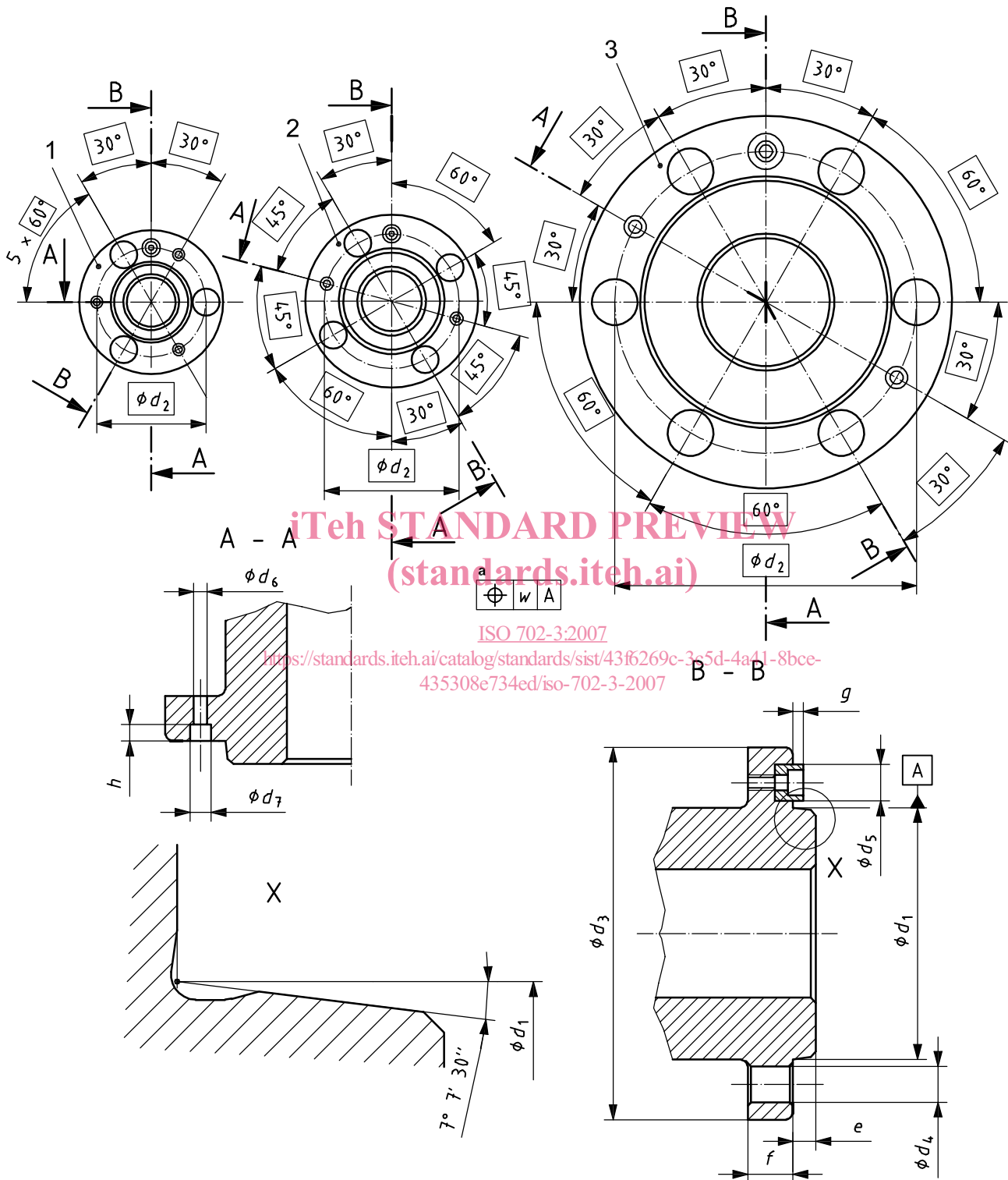
In this part of ISO 702, all the dimensions and tolerances are expressed in millimetres.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 702-3:2007
<https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007>

3 Sizes for interchangeability

3.1 Spindle noses



- Key**
- 1 size Nos. 3 and 4, No. 3 without button
 - 2 size Nos. 5 to 8
 - 3 size Nos. 11 to 20
 - a All holes.

Figure 1 — Spindle noses

Table 1 — Dimensions of spindle noses

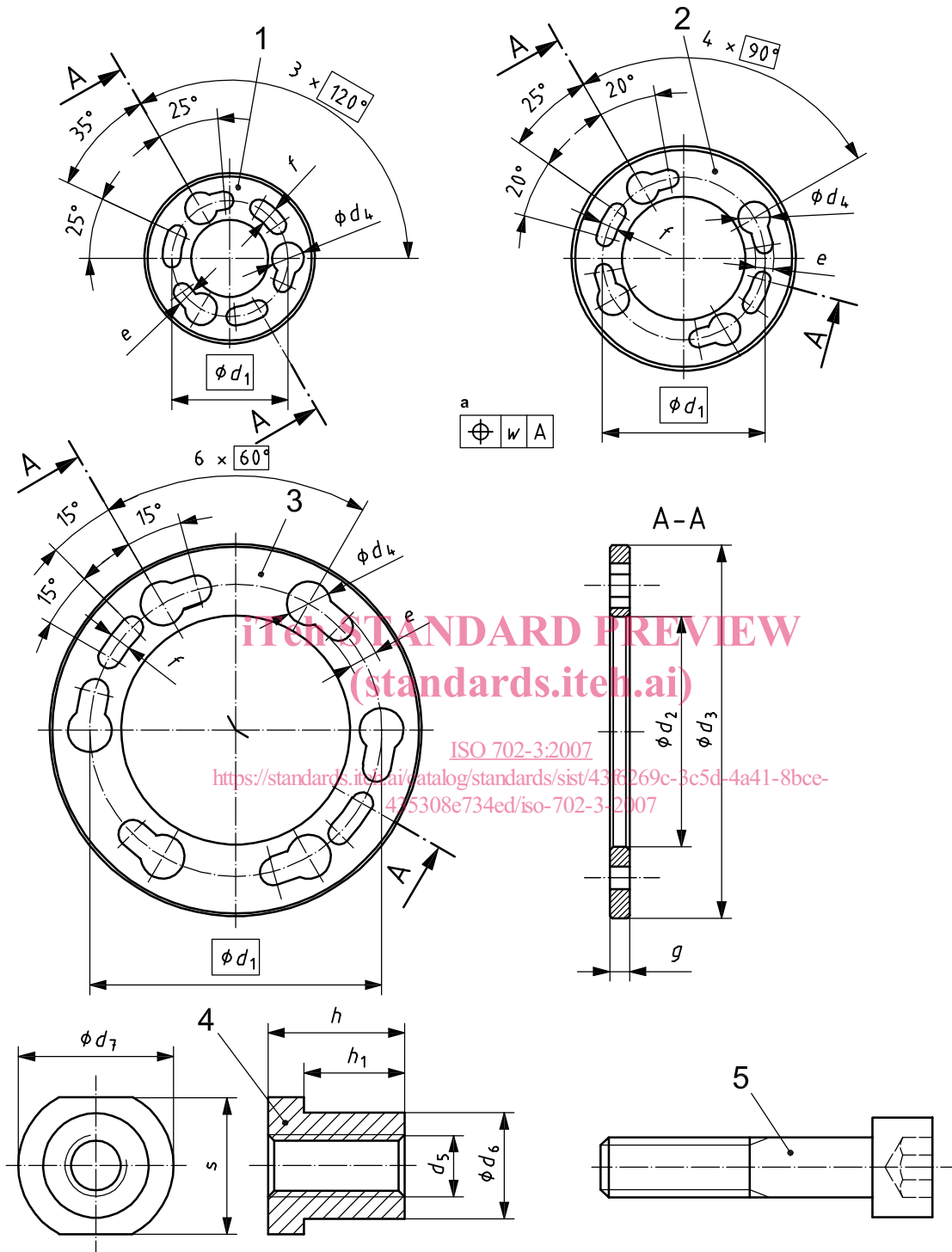
Dimension	Size No.								
	3	4	5	6	8	11	15	20	
d_1	nom.	53,975	63,513	82,563	106,375	139,719	196,869	285,775	412,775
	tol.	+0,008 0	+0,008 0	+0,010 0	+0,010 0	+0,012 0	+0,014 0	+0,016 0	+0,020 0
d_2	75	85	104,8	133,4	171,4	235	330,2	463,6	
d_3	102	112	135	170	220	290	400	540	
d_4	21	21	21	23	29	36	43	43	
d_5 H8/h8	21	14,25	15,9	19,05	23,8	28,6	34,9	41,3	
d_6	6,4	6,4	6,4	8,4	10,5	10,5	13	13	
d_7	10,4	10,4	10,4	13,5	16,5	16,5	19	19	
e	11	11	13	14	16	18	19	21	
f	16	20	22	25	28	35	42	48	
g	16	5	5	5	6	8	8	8	
h	10	10	10	11	12	13	15	15	
w	0,2	0,2	0,2	0,2	0,2	0,2	0,3	0,3	
NOTE	General tolerance for untoleranced dimensions: $\pm 0,4$ mm.								

(standards.iteh.ai)

ISO 702-3:2007

<https://standards.iteh.ai/catalog/standards/sist/43f6269c-3c5d-4a41-8bce-435308e734ed/iso-702-3-2007>

3.2 Bayonet disc



- Key**
- 1 size Nos. 3 and 4
 - 2 size Nos. 5 to 8
 - 3 size Nos. 11 to 20
 - 4 thrust socket
 - 5 hexagon-socket head screw
 - a All holes.

Figure 2 — Bayonet disc

Table 2 — Dimensions of bayonet disc

Dimension	Size No.								
	3	4	5	6	8	11	15	20	
d_1	75	85	104,8	133,4	171,4	235	330,2	463,6	
d_2	50	60	80	100	130	185	270	400	
d_3	110	120	145	180	230	300	410	550	
d_4	21	21	21	23	29	36	43	43	
d_5	M6	M6	M6	M8	M10	M10	M12	M12	
d_6	11	11	11	13	17	17	22	22	
d_7	16	16	16	19	25	25	32	32	
e	11,5	11,5	11,5	14	18	23	27	27	
f	11,5	11,5	11,5	14	18	18	23	23	
g	$\begin{matrix} 0 \\ -0,1 \end{matrix}$	5	6	8	10	12	16	18	22
h		8	9	12	15	18	22	26	30
h_1	$\begin{matrix} +0,2 \\ 0 \end{matrix}$	5,2	6,2	8,2	10,2	12,2	16,2	18,3	22,3
s	$\begin{matrix} 0 \\ -0,2 \end{matrix}$	14	14	14	17	22	22	27	27
w		0,2	0,2	0,2	0,2	0,2	0,3	0,3	
Hexagon-socket head screw	M6 × 15	M6 × 20	M6 × 25	M8 × 30	M10 × 35	M10 × 45	M12 × 55	M12 × 65	
NOTE	General tolerance for untoleranced dimensions: ± 0,4 mm.								