INTERNATIONAL STANDARD

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Second edition
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Woodruff keyseat cutters — Dimensions

Fraises pour logement de clavettes-disques — 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).

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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 12197:1996), of which it constitutes a minor revision, notably with the addition of Annex A, which gives the relationship between the designations of this International Standard and the ISO 13399 series.

Woodruff keyseat cutters — Dimensions

1 Scope

This International Standard specifies the dimensions of milling cutters intended for manufacturing woodruff keyseats in accordance with ISO 3912.

Two types of woodruff keyseat cutters with cylindrical shank are specified:

— woodruff keyseat cutters with cylindrical shank, in accordance with ISO 3338-1;

— woodruff keyseat cutters with flatted cylindrical shank, in accordance with ISO 3338-2.

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.

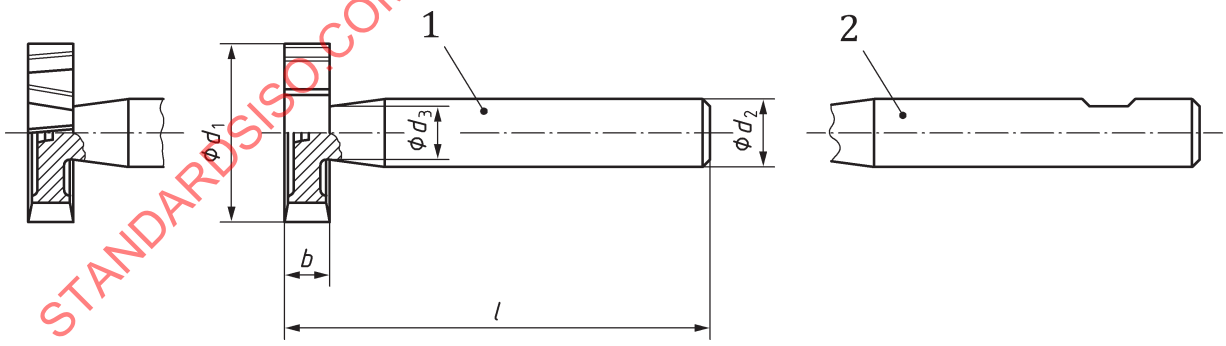
ISO 3338-1, *Cylindrical shanks for milling cutters — Part 1: Dimensional characteristics of plain cylindrical shanks*

ISO 3338-2, *Cylindrical shanks for milling cutters — Part 2: Dimensional characteristics of flatted cylindrical shanks*

ISO 3912, *Woodruff keys and keyways*

3 Dimensions

See Figure 1 and Table 1.



Key

1 plain parallel shank (ISO 3338-1)

2 flatted parallel shank (ISO 3338-2)

Figure 1

Table 1

Dimensions in millimetres

d_1 nom.	d_1 tol.	b e8	d_2	d_3	l	**Key** ISO 3912
4	+0,5 +0,4	1	6	1,8	50	1 × 1,4
7		1,5		2,8		1,5 × 2,6
		2		3,2		2 × 2,6
10		2		4		2 × 3,7
		2,5				2,5 × 3,7
13		3	10	4,6	56	3 × 5
16		3		4,6		3 × 6,5
		4				4 × 6,5
		5		5		5 × 6,5
19	+0,5 +0,3	4		5,6	63	4 × 7,5
		5		6		5 × 7,5
22		5		6		5 × 9
		6		6,5		6 × 9
25		6		7,5		6 × 10
28		8		8,5		8 × 11
32		10	12	9,3	71	10 × 13

[a] Cutters may be provided with radius. In that case, the value of the radius shall be such that cutters are able to manufacture keyways in accordance with ISO 3912.

Annex A
(informative)

Relationship between designations in this International Standard and ISO 13399 (all parts)

For relationship between designations in this International Standard and preferred symbols according to ISO 13399 (all parts), see Table A.1.

Table A.1 — Relationship between designations in this International Standard and ISO 13399 (all parts)

Symbol in ISO 12197	Reference in ISO 12197	Property name in ISO 13399 (all parts)	Symbol in ISO 13399 (all parts)	Reference in ISO 13399 (all parts)
d_1	Figure 1 Table 1	cutting diameter	DC	71D084653E57F
d_2	Figure 1 Table 1	connection diameter machine side	DCONMS	71EBDBF5060E6
d_3	Figure 1 Table 1	neck diameter	DN	71EAC48EC5DE0
b	Figure 1 Table 1	depth of cut maximum	APMX	71D07576C0558
l	Figure 1 Table 1	overall length	OAL	71D078EB7C086

Bibliography

[1] ISO 13399 (all parts), *Cutting tool data representation and exchange*

