INTERNATIONAL STANDARD

ISO 2584

Second edition
2016-10-15

Cylindrical cutters with plain bore and key drive — Metric series

Fraises cylindriques 1 taille, à surfacer, à alésage lisse, à entraînement par clavette — Série métrique

Reference number
ISO 2584:2016(E)

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Foreword

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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 2584:1972), 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.

Cylindrical cutters with plain bore and key drive — Metric series

1 Scope

This International Standard specifies the dimensions of metric series cylindrical cutters with plain bore and key drive, intended for fitting to cutter arbors.

It is applicable to solid cutters and also to interlocking cutters.

Solid cutters are made either with straight teeth or with helicoidal teeth angled to the right or left; interlocking cutters are always made with straight or helicodial teeth angled to the left and right alternately.

The range of outside diameters of these cutters is taken from ISO 523.

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 240, *Milling cutters — Interchangeability dimensions for cutter arbors or cutter mandrels*

3 Dimensions

3.1 Solid cutters

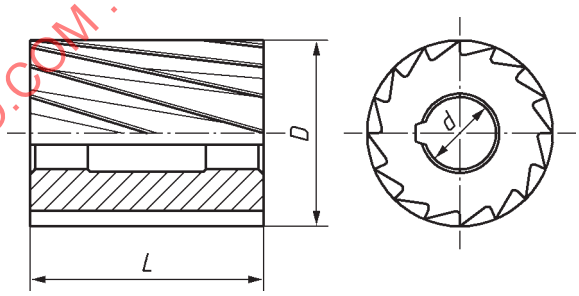

Figure 1 — Solid cutters

Table 1

Dimensions in millimetres

D	d^a	L						
J_s16	H7	40	50	63	70	80	100	125
50	22	X		X		X		
63	27		X		X			
80	32			X			X	
100	40				X			X

[a] The bore and key way dimensions shall be in accordance with the metric series of ISO 240.

3.2 Interlocking cutters

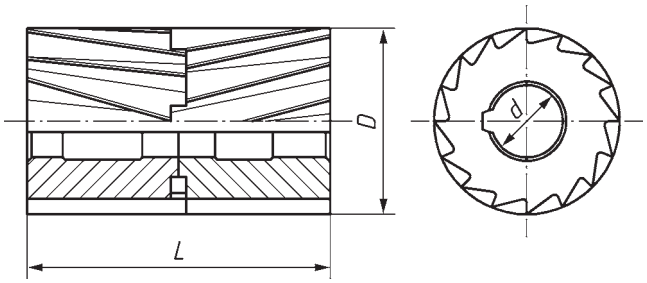

Figure 2 — Interlocking cutters

Table 2

Dimensions in millimetres

D	d^a	L					
J_s16	H7	80	100	125	160	200	250
80	32	X		X			
100	40		X		X		
125	50			X		X	
160	60				X		X

[a] The bore and key way dimensions shall be in accordance with the metric series of ISO 240.

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 2584	Reference in ISO 2584	Property name in ISO 13399 (all parts)	Symbol in ISO 13399 (all parts)	Reference in ISO 13399 (all parts)
D	Figures 1 and 2 Tables 1 and 2	cutting diameter	DC	71D084653E57F
d	Figures 1 and 2 Tables 1 and 2	connection diameter machine side	DCONMS	71EBDBF5060E6
d H7	Tables 1and 2	tolerance class connection diameter machine side	TCDCONMS	72719B2BD8041
L	Figures 1 and 2 Tables 1 and 2	overall length	OAL	71D078EB7C086

Bibliography

[1] ISO 523,[1)] *Milling cutters — Recommended range of outside diameters*

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

1) Withdrawn.