

BS ISO 2584:2016



BSI Standards Publication

Cylindrical cutters with plain bore and key drive — Metric series

National foreword

This British Standard is the UK implementation of ISO 2584:2016.

The UK participation in its preparation was entrusted to Technical Committee MTE/18, Tools tips and inserts for cutting applications.

A list of organizations represented on this committee can be obtained on request to its secretary.

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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

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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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 helicoidal 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

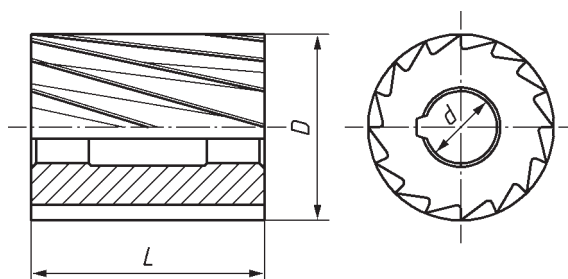


Figure 1 — Solid cutters

Table 1

Dimensions in millimetres

D Js16	d^a H7	L						
		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

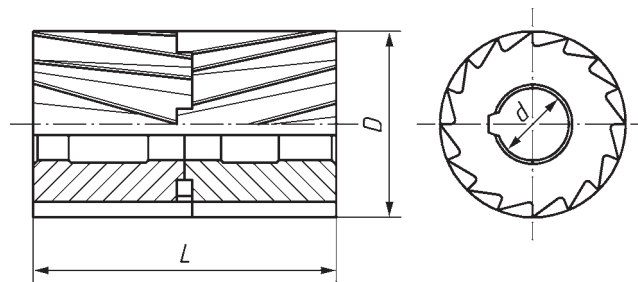


Figure 2 — Interlocking cutters

Table 2

Dimensions in millimetres

D	d^a	L					
		80	100	125	160	200	250
J_s16	H7						
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)
<i>D</i>	Figures 1 and 2 Tables 1 and 2	cutting diameter	DC	71D084653E57F
<i>d</i>	Figures 1 and 2 Tables 1 and 2	connection diameter machine side	DCONMS	71EBDBF5060E6
<i>d</i> H7	Tables 1 and 2	tolerance class connection diameter machine side	TCDCONMS	72719B2BD8041
<i>L</i>	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.

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