INTERNATIONAL STANDARD

ISO 5468

Fourth edition
2017-02

Rotary and rotary impact masonry drill bits with hardmetal tips — Dimensions

Forets pour bâtiment, à rotation et percussion, à plaquettes en métal-dur (carbures métalliques) — Dimensions

Reference number
ISO 5468:2017(E)

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

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 voluntary nature of standards, 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.

This document was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with defined cutting edges, cutting items*.

This fourth edition cancels and replaces the third edition (ISO 5468:2006), of which it constitutes a minor revision with the following changes:

— added Annex A giving the relationship between the symbols of this document and the symbols according to the ISO 13399 series.

Introduction

This document has been prepared with due regard to the relationship between the masonry drill bits themselves, their tolerances and the holes which they produce in order that plugs and fixings may be positively located.

Account has been taken of the sizes which are in greatest demand and the range of diameters shown has been established only after several years of market research. Due recognition has also been given to the requirements of modern drilling technology, particularly, the development of rotary impact drilling.

Rotary and rotary impact masonry drill bits with hardmetal tips — Dimensions

1 Scope

This document specifies the dimensions, in millimetres, of rotary and rotary impact masonry drill bits with hardmetal tips, having diameters in the range of 4 mm to 25 mm inclusive and overall, and working lengths in the series short, long and extra-long.

It does not apply to hammer drills.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

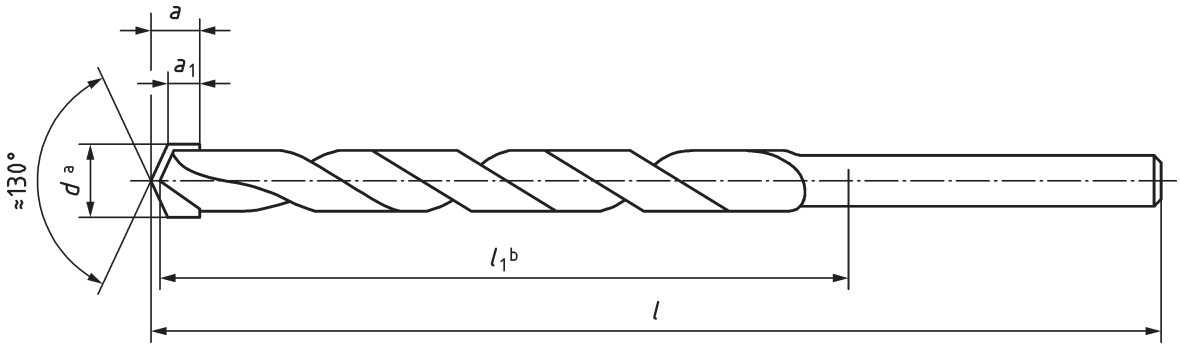
ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

4 Dimensions

The dimensions and tolerances are shown in Figure 1 and given in Table 1.



Key

a height of tip
a_1 shoulder of tip
d cutting diameter
l total length
l_1 working length
a The diameter d is measured across the corner of the hardmetal tip after removal of paint or protective coating.
b The length l_1 corresponds to the overhang length of the chuck.

Figure 1

Table 1

Dimensions in millimetres

d		a[a]	a_1[a]	Short series		Long series		Extra-long series (wall breakthrough)				Chuck size[b]
				l	$\approx l_1$	l	$\approx l_1$	l	$\approx l_1$	l	$\approx l_1$	
nom.	tol.	min.	min.									
4	+0,40 +0,15	0,8d	0,57d	75	39	150	85	—	—	—	—	10
4,5				85	39							10 or 13
5												
5,5												
6				100	54							
6,5	+0,45 +0,20											
7												
8		0,7d	0,47d	120	80	200	135	—	—	—	—	10, 13 or 16
9												
10												
11	+0,5 +0,2			150	90							
12						220	150	400	350	600	550	
13						—	—	—	—	—	—	
14								400	350	600	550	
15		0,6d	0,37d									
16												
18				160	100	—	—					
20	+0,55 +0,20											13 or 16
22		0,55d	0,32d									
24								—	—	—	—	
25								—	—	600	550	

[a] This dimension, a or a_1, shall be observed.

[b] Required size depending upon the actual diameter of the shank.

Annex A
(informative)

Relationship between designations in this document and ISO 13399 series

For the relationship between the designations in this document and preferred symbols according to ISO 13399 series, see Table A.1.

Table A.1 — Relationship between designations in this document and ISO 13399 series

Symbol in this document	Reference in this document	Property name in the ISO 13399 series	Symbol in the ISO 13399 series	Reference in the ISO 13399 series
d	Figure 1 Table 1	cutting diameter	DC	71D084653E57F
l_1	Figure 1 Table 1	tool assembly length	LTA	728B074A39EBC
l	Figure 1 Table 1	overall length	OAL	71D078EB7C086
≈130°	Figure 1	point angle	SIG	71DCCC4FEF366

Bibliography

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

ICS 25.100.30

Price based on 4 pages