# INTERNATIONAL STANDARD

ISO 3292

Third edition 2016-10-15

## Extra-long parallel shank twist drills

Forets extra-longs à queue cylindrique



ISO 3292:2016(E)



#### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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

Con	tents	Page
Forew	vord	iv
1	Scope	1
2	Normative references	1
3	Dimensions	1
4	Technical specifications	1
5	Designation	1
Anne	x A (informative) Relationship between designations in this International Standard and ISO 13399 (all parts)	3
Biblio	ography	4

#### **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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 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: <a href="www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 2, *Holding tools*, *adaptive items and interfaces*.

This third edition cancels and replaces the second edition (ISO 3292:1995), of which it constitutes a minor revision, notably with the addition of <u>Annex A</u>, which gives the relationship between the designations of this International Standard and the ISO 13399 series.

### Extra-long parallel shank twist drills

#### 1 Scope

This International Standard specifies the dimensions of extra-long parallel shank twist drills in the range of 2 mm to 14 mm diameter with an overall length range of 125 mm to 400 mm.

#### 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 10899, High-speed steel two-flute twist drills — Technical specifications

#### 3 Dimensions

See Figure 1 and Table 1.

#### 4 Technical specifications

Unless otherwise specified, technical requirements shall comply with ISO 10899.

#### 5 Designation

Extra-long parallel shank twist drills in accordance with this International Standard shall be designated by the following:

- a) "twist drill";
- b) a reference to this International Standard, i.e. ISO 3292;
- c) drill diameter, d, in millimetres;
- d) overall length, *l*, in millimetres.

EXAMPLE An extra-long parallel shank twist drill of diameter d = 10 mm and overall length l = 250 mm is designated as follows:

#### Twist drill ISO 3292 - 10 - 250

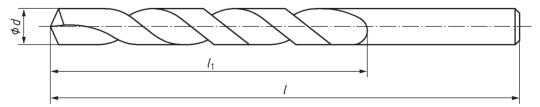


Figure 1 — Extra-long parallel shank twist drills

Table 1 — Extra-long parallel shank twist drills — Preferred sizes

Dimensions in millimetres

Preferred	Overall length					
diameters d				I		
h8	125	160	200	250	315	400
110	Flute length					
	$l_1$					
	80	100	150	200	250	300
2	X	X				
2,5	X	X				
3		X	X			
3,5		X	X	X		
4		X	X	X	X	
4,5		X	X	X	X	
5			X	X	X	X
5,5			X	X	X	X
6			X	X	X	X
6,5			X	X	X	X
7			X	X	X	X
7,5			X	X	X	X
8				X	X	X
8,5				X	X	X
9				X	X	X
9,5				X	X	X
10				X	X	X
10,5				X	X	X
11				X	X	X
11,5				X	X	X
12				X	X	X
12,5				X	X	X
13				X	X	X
13,5				X	X	X
14				X	X	X
Range of diameters	2 ≤ <i>d</i> ≤ 2,5	2 ≤ <i>d</i> ≤ 4,75	2,65 < d ≤ 7,5	3,35 < <i>d</i> ≤ 14	3,75 < <i>d</i> ≤ 14	4,75 < <i>d</i> ≤ 14

#### 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 <u>Table A.1</u>.

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

Symbol in ISO 3292	Reference in ISO 3292	Property name in ISO 13399 (all parts)	Symbol in ISO 13399 (all parts)	Reference in ISO 13399 (all parts)
d	Figure 1 Table 1	cutting diameter	DC	71D084653E57F
$l_1$	Figure 1 Table 1	length chip flute	LCF	71DCCC27DEF53
I	Figure 1 Table 1	overall length	OAL	71D078EB7C086

## **Bibliography**

- [1] ISO 235, Parallel shank jobber and stub series drills and Morse taper shank drills
- [2] ISO 494, Cylindrical shank twist drills Long series
- [3] ISO 13399 (all parts), Cutting tool data representation and exchange

