### INTERNATIONAL STANDARD

ISO 3315

Fifth edition 2018-05

# Assembly tools for screws and nuts — Driving parts for hand-operated square drive socket wrenches — Dimensions and tests

Outils de manoeuvre pour vis et écrous — Pièces de commande pour douilles à main à carré conducteur — Dimensions et essais

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Co	ntent	ts	Page
Fore	eword		iv
1	Scop	oe	1
2	Norr	mative references	1
3	Tern	ns and definitions	1
4	Dime	ensions	1
5	Driv	ing squares	4
6	Torg	que testing	4
	6.1	Method	4
	6.2	Special requirements	
		6.2.1 Test of T-handle, square drive	
		6.2.2 Test of speeder, brace type	
		6.2.3 Test of ratchet handle and ratchet handle, revers	
		6.2.4 Test of screwdriver, external square	
		6.2.5 Test of nut spinner, flex head	
		6.2.6 Test of offset handle, square drive	4
7	Endı	urance test for ratchet handles	4
8	Desi	gnation	5
9	Marl	king iTeh Standards	5
Bibl	iograpł	(nttps://standards.iten.:	

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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 <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>).

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

This document was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 10, *Assembly tools for screws and nuts, pliers and nippers*.

This fifth edition cancels and replaces the fourth edition (ISO 3315:2011), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

- correction of footnotes in <u>Table 1</u>;
- change of the gender related terms "male" to "external" and "female" to "internal";
- deletion of the unit "mm" for the nominal dimensions;
- addition of the mandatory <u>Clause 3</u> "Terms and definitions".

## Assembly tools for screws and nuts — Driving parts for hand-operated square drive socket wrenches — Dimensions and tests

### 1 Scope

This document is applicable to driving parts of hand-operated square drive socket wrenches.

NOTE The driving parts covered by this document are the ones identified in ISO 1703:2018 under reference No.  $6\,1\,00\,01\,0$  and  $6\,1\,00\,01\,1$ ,  $6\,1\,00\,03\,0$ ,  $6\,1\,00\,04\,0$ ,  $6\,1\,00\,05\,0$  and  $6\,1\,00\,05\,1$ ,  $6\,1\,00\,06\,0$  and  $6\,1\,00\,06\,1$ ,  $6\,1\,00\,09\,0$  as well as  $6\,1\,00\,10\,0$  and  $6\,1\,00\,10\,1$ .

### It specifies:

- a) the overall dimensions;
- b) the minimum Rockwell hardness value for their driving squares;
- c) the method of torque testing;
- d) the minimum torsional strength values;
- e) the designation;
- f) the marking.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1174-1, Assembly tools for screws and nuts — Driving squares — Part 1: Driving squares for hand socket tools

### 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:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

### 4 Dimensions

The overall dimensions are given in <u>Table 1</u>.

Table 1 — Overall dimensions

according to ISO 1703         square drive         Image: Mark of Juniary Indians of Juniary Indians of Juniary Indians of Juniary Indians Indians of Juniary Indians	
dmax         l <sub>1</sub> min         l <sub>1</sub> max         l <sub>2</sub> max           6,3         14         100         160         24           10         23         150         250         35           12,5         27         220         320         50           20         40         430         510         62           20         40         430         510         62           20         6,3         30         420         60         115           20         6,3         30         420         60         115           20         6,3         30         420         60         115           20         10         40         470         70         125           20         12,5         50         510         85         145           20         6,3         25         110         150         27           20         10         1,min         1,max         1,max           20         20         230         30         45           20         20         230         30         45           20         23         110         150         <	according to ISO 1703
6,3         14         100         160         24           10         23         150         250         35           20         40         430         510         62           20         40         430         510         62           20         40         430         510         62           20         40         430         50         50           20         6,3         30         420         60         115           20         6,3         30         420         60         115           20         10         40         470         70         125           20         110         40         470         70         125           20         12,5         50         510         85         145           20         6,3         25         110         150         27           20         12,5         50         230         36           20         20         230         300         45           20         23         10         150         27           20         23         23         30         23	
10	
12,5   27   220   320   50     20	T-handle,
20         40         430         510         62           25         52         500         760         80           25         52         500         760         80           25         50         760         70         80           25         30         420         60         115           26         10         40         470         70         125           27         40         470         70         125           28         10         85         145           29         10         85         145           20         50         510         85         145           29         10         10         10         10         10           20         20         210         210         45           30         45         110         150         27           40         430         630         62           40         430         630         62           40         430         630         62           40         430         630         62           40         430         630	61
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Total Color         6,3         30         420         60         115           Color         10         40         470         70         125           Total Color         10         40         470         70         125           Total Color         10         40         470         70         125           Total Color         10         85         145         145           Total Color         10         35         140         220         36           Total Color         10         35         140         220         36           Total Color         430         630         62         36           Total Color         430         630         62           Total Color         110         150         27           Total Color         110         120         140         220         36           Total Color         110         120         230         45         20           Total Color <td></td>	
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6,3     25     110     150     27       10     35     140     220     36       12,5     50     230     300     45       20     70     430     630     62       25     90     500     900     80	
10     35     140     220     36       12,5     50     230     300     45       20     70     430     630     62       25     90     500     900     80	
12,5     50     230     45       20     70     430     630     62       25     90     500     900     80	Ratchet
20     70     430     630     62       25     90     500     900     80	9
25 90 500 80	9
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