
**Assembly tools for screws and nuts —
Attachments for hand-operated
square drive socket wrenches —
Dimensions and tests**

*Outils de manoeuvre pour vis et écrous — Adaptateurs pour douilles à
main à carré conducteur — Dimensions et essais*

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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).

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 10, *Assembly tools for screws and nuts, pliers and nippers*.

This fifth edition cancels and replaces the fourth edition (ISO 3316:2012), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

- a) correction of footnotes in [Table 1](#);
- b) change of the gender related terms “male” to “external” and “female” to “internal”;
- c) deletion of the unit “mm” for the nominal dimensions;
- d) addition of the mandatory [Clause 3](#) “Terms and definitions”.

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

1 Scope

This document applies to attachments for hand-operated square drive socket wrenches.

NOTE 1 The attachments for hand-operated square drive socket wrenches covered by this standard are the ones identified in ISO 1703:2018 under reference No. 5 1 00 03 0, 5 1 00 04 0, 5 1 00 04 1 and 5 1 00 05 0.

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; and
- f) the marking.

NOTE 2 For the specification of square adaptors with a hexagon or cylindrical flat drive, for power socket wrenches, see ISO 3317.

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<https://standards.iteh.ai/catalog/standards/iso/96bd6ade-9272-43ec-a6fa-47cbe24eea01/iso-3316-2018>

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.

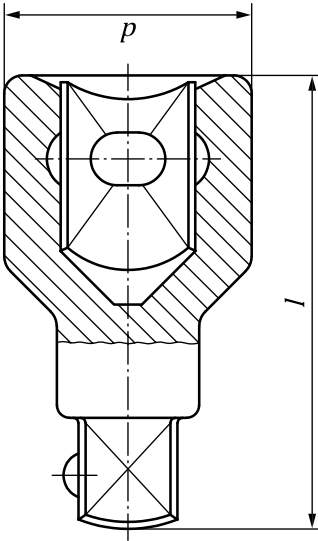
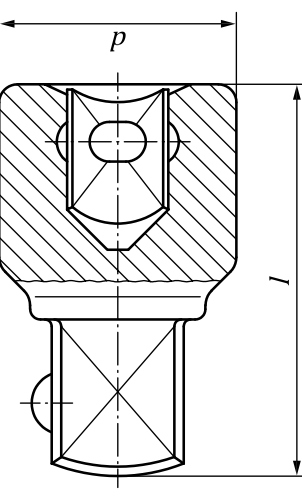
ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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

4 Dimensions

The overall dimensions are given in [Table 1](#).

Table 1 — Overall dimensions

| Tool | Description and designation according to ISO 1703 | Nominal dimension of square drive | | Dimensions mm | | Torque ^a M_{\min} N·m |
|--|---|-----------------------------------|-----------------|------------------|------------|--|
| | | Internal square | External square | l_{\max} | d_{\max} | |
|  | Adaptor socket wrench, hand-operated 5 1 00 03 0 | 10 | 6,3 | 32 | 20 | 62 |
| | | 12,5 | 10 | 44 | 25 | 202 |
| | | 20 | 12,5 | 58 | 38 | 512 |
| | | 25 | 20 | 85 | 52 | 1 412 |
|  | | 6,3 | 10 | 27 | 16 | 62 |
| | | 10 | 12,5 | 38 | 23 | 202 |
| | | 12,5 | 20 | 50 | 30 | 512 |
| | | 20 | 25 | 68 | 40 | 1 412 |

^a Torques, M, for adaptors and extension bars are the maximum values for the smaller square from series E of ISO 1711-1:2016. For the universal joints, the values have been calculated using those maximum values, multiplied by the coefficient 0.55.

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