INTERNATIONAL STANDARD

**ISO 1711-2**

Fourth edition
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# Assembly tools for screws and nuts — Technical specifications —

## Part 2: Machine-operated sockets (impact)

*Outils de manoeuvre pour vis et écrous — Spécifications techniques —*

*Partie 2: Douilles à machine (impact)*

Reference number
ISO 1711-2:2019(E)

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# Contents

Page

**Foreword** ..... **iv**
**Introduction** ..... **v**
**1 Scope** ..... **1**
**2 Normative references** ..... **1**
**3 Terms and definitions** ..... **1**
**4 Requirements** ..... **1**
4.1 General ..... 1
4.2 Test torsion torques ..... 1
4.3 Materials ..... 2
4.4 Hardness testing ..... 2
**5 Torque testing** ..... **2**
5.1 Method ..... 2
5.2 Test of machine-operated square drive sockets ..... 3
**Bibliography** ..... **6**

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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).

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For an explanation of 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 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 fourth edition cancels and replaces the third edition (ISO 1711-2:2016), which has been technically revised.

The main changes compared to the previous edition are as follows:

— general tolerances on opening have been added;

— additional sizes 26 and 29 for width across flats have been added to Table 3;

— the structure of the document has been revised.

A list of all parts in the ISO 1711 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.


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# Introduction

When testing machine-operated impact sockets, there are three types of testing that could be relevant:

— torsional testing;

— impact testing;

— endurance testing.

This document covers only torsional testing of machine-operated sockets. Currently, the torsional test and hardness values given in this document ensure sockets will last a reasonable impact life if the appropriate tool is used.

An impact test or endurance test is desired, but at present, there is no procedure suitable for standardization available. This will be an issue for a future revision of this document.

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# Assembly tools for screws and nuts — Technical specifications —

# Part 2: Machine-operated sockets (impact)

## 1 Scope

This document specifies hardness and minimum torsional strength for machine-operated square drive sockets in accordance with ISO 2725-2 intended for use with impact wrenches.

EXAMPLE Reference nos. 2 2 02 01 0; 2 2 02 02 0; 5 2 00 04 0.

NOTE The sockets mentioned above are listed under their respective reference numbers in ISO 1703.

## 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 691, *Assembly tools for screws and nuts — Wrench and socket openings — Tolerances for general use*

ISO 2725-2, *Assembly tools for screws and nuts — Square drive sockets — Part 2: Machine-operated sockets ("impact")*

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method*

## 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 http://www.electropedia.org/

## 4 Requirements

### 4.1 General

The tolerances on opening *s* shall comply with ISO 691.

### 4.2 Test torsion torques

The empiric formulae giving minimum test torsion torques, *M*, in newton metres, as a function of width across flats, *s*, in millimetres, are given for information in Table 1.

The minimum test torsion torques to be applied, are given in Table 3.

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