INTERNATIONAL STANDARD

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Assembly tools for screws and nuts — Double-ended wrenches — Size pairing

Outils de manœuvre pour vis et écrous — Clés doubles de serrage — Appariement des ouvertures





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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).

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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: www.iso.org/iso/foreword.html.

The committee responsible for this document is 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 1085:1999), which has been technically revised with the following changes:

- a) addition of reference number according to ISO 1703 in the Scope:
- b) revision of sizes covered in <u>Table 1</u>, with the addition of nominal widths across flats not covered by ISO 272.

Assembly tools for screws and nuts — Double-ended wrenches — Size pairing

1 Scope

This document specifies the size pairing of double-ended wrenches with unequal nominal widths across flats.

NOTE The wrenches covered by this document are those identified in ISO 1703:2005 under reference nos. $1\,1\,01\,02\,0, 1\,1\,02\,03\,0, 1\,1\,02\,04\,0, 1\,1\,02\,05\,0, 1\,1\,02\,06\,0, 1\,1\,02\,08\,0$.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

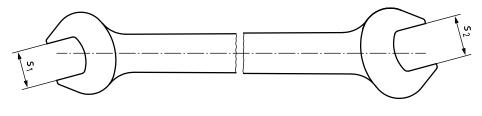
No terms and definitions are listed in this document.

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 Pairings

<u>Figure 1</u> gives examples of designations s_1 and s_2 . <u>Table 1</u> gives the pairings.



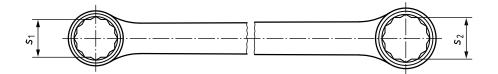


Figure 1 — Double-ended wrenches

Table 1 — Double-ended wrenches pairings

Nominal width across flats
$s_1 \times s_2$
3,2 × 4
3,2 × 5,5
4 × 5
5 × 5,5
5,5 × 7
6 × 7 ^a
7 × 8
8 × 9a
8 × 10
10 × 11
10 × 12 ^a
10 × 13
11 × 13
12 × 13a
12 × 14 ^a
13 × 14a
13 × 15
13 × 16
13 × 17 ^a
14 × 15
14 × 16
14×17^{a}
15 × 16
15 × 17 ^a
15 × 18
16 × 17 ^a
16 × 18
17 × 19 ^a
18 × 19a
18 × 21
19 × 22a
19 × 24a
20 × 22a
21 × 22a
21 × 23 ^a
21 × 24
22 × 24 ^a
24 × 27
24 × 30
27 × 30
27 × 32 ^a

^a This pairing contains at least one value of *s* not covered by ISO 272.

 Table 1 (continued)

Nominal width across flats
$s_1 \times s_2$
30 × 32a
30 × 34
30 × 36
32 × 34a
32 × 36a
34 × 36
36 × 41
41 × 46
46 × 50
50 × 55
55 × 60
This pairing contains at least one value of <i>s</i> not covered by ISO 272.

NOTE The nominal width across flats refer to ISO 691.

Bibliography

- [1] ISO 272, Fasteners Hexagon products Widths across flats
- [2] ISO 691, Assembly tools for screws and nuts Wrench and socket openings Tolerances for general use
- [3] ISO 1703:2005, Assembly tools for screws and nuts Designation and nomenclature

