INTERNATIONAL STANDARD 1085

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

TC 29

Combinations of double-ended wrench gaps

Appariement des ouvertures de clés doubles de serrage

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Descriptors : tools, wrenches, dimensions.

Price based on 3 pages

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 29 has reviewed ISO Recommendation R 1085 and found it technically suitable for transformation. International Standard ISO 1085 therefore replaces ISO Recommendation R 1085-1969 to which it is technically identical.

ISO Recommendation R 1085 was approved by the Member Bodies of the following countries :

Australia	Ireland	South Africa, Rep. of
Austria	Israel	Spain
Belgium	Italy	Sweden
Czechoslovakia	Japan	Switzerland
Egypt, Arab Rep. of	Korea, Rep. of	Thailand
Finland	Netherlands	Turkey
France	Norway	United Kingdom
Germany	Peru	U.S.S.R.
Hungary	Poland	Yugoslavia
India	Portugal	

No Member Body expressed disapproval of the Recommendation.

No Member Body disapproved the transformation of ISO/R 1085 into an International Standard.

Printed in Switzerland

Combinations of double-ended wrench gaps

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies combinations of double-ended wrench gaps. Its field of application covers not only flat wrenches for nuts but also all wrenches with two fixed ends for screws and nuts, such as socket wrenches.

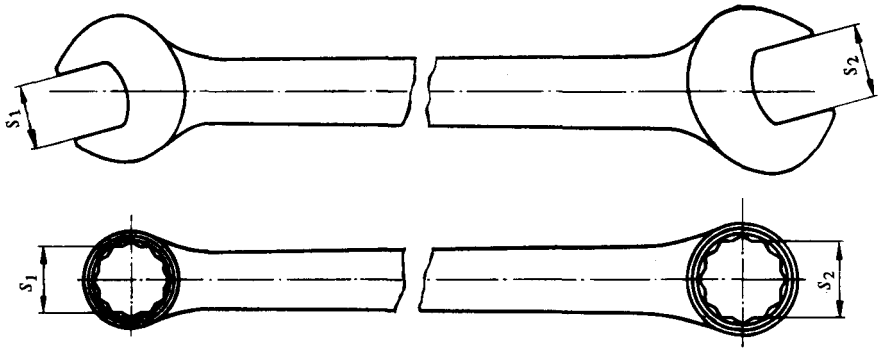
It essentially includes two numerical tables relating to wrench gaps, referring to widths across flats of ISO/R 272, *Hexagon bolts and nuts — Widths across flats, heights of heads, thickness of nuts,* expressed :

- the first in millimetres, in accordance with the values of the 2nd edition of ISO/R 272 (1968);
- the second in inches, in accordance with the values of the 1st edition of ISO/R 272 (1962), as the 2nd edition does not include inch values.

The combinations of wrench gaps are given according to two series, 1 and 2, equally recommended; both series supplement one another and all widths across flats of ISO/R 272 are represented in them.

It also provides, in an annex, for other combinations, less recommended though in common use, which include, at least to some extent, other wrench gaps than those resulting from the application of ISO/R 272.

2 RECOMMENDED COMBINATIONS



2.1 Metric series

Dimensions in millimetres

$s_1 \times s_2$	
Series 1	Series 2
3,2 × 4	
	4 × 5
5 × 5,5	
	5,5 × 7
7 × 8	
	8 × 10
10 × 11	
	11 × 13
	12 × 14
13 × 17	
	17 × 19
19 × 22	
	22 × 24
24 × 27	
	27 × 30
30 × 32	
	32 × 36
36 × 41	
	41 × 46
46 × 50	
	50 × 55
55 × 60	

2.2 Inch series

Dimensions in inches

$s_1 \times s_2$	
Series 1	Series 2
	$\frac{1}{8} \times \frac{5}{32}$
$\frac{3}{16} \times \frac{1}{4}$	
$\frac{5}{16} \times \frac{11}{32}$	
$\frac{3}{8} \times \frac{7}{16}$	
	$\frac{7}{16} \times \frac{1}{2}$
$\frac{1}{2} \times \frac{9}{16}$	
	$\frac{9}{16} \times \frac{5}{8}$
$\frac{5}{8} \times \frac{11}{16}$	
	$\frac{5}{8} \times \frac{3}{4}$
	$\frac{11}{16} \times \frac{3}{4}$
$\frac{11}{16} \times \frac{13}{16}$	
$\frac{3}{4} \times \frac{7}{8}$	
	$\frac{13}{16} \times \frac{7}{8}$
$\frac{7}{8} \times \frac{15}{16}$	
	$\frac{15}{16} \times 1\frac{1}{8}$
$1\frac{1}{8} \times 1\frac{5}{16}$	
$1\frac{5}{16} \times 1\frac{1}{2}$	
$1\frac{11}{16} \times 1\frac{7}{8}$	
$2\frac{1}{16} \times 2\frac{1}{4}$	

ANNEX

OTHER COMBINATIONS, LESS RECOMMENDED

(but still in use provisionally)

Dimensions in millimetres

s_1 × s_2
2,5 × 3,2
3,2 × 5,5
6 × 7
8 × 9
12 × 13
13 × 14
14 × 17
19 × 24
24 × 30
30 × 36

Dimensions in inches

s_1 × s_2
$\frac{7}{8}$ × 1 $\frac{1}{16}$
$\frac{15}{16}$ × 1
1 × 1 $\frac{1}{16}$
1 $\frac{1}{16}$ × 1 $\frac{1}{8}$
1 $\frac{1}{8}$ × 1 $\frac{1}{4}$
1 $\frac{3}{16}$ × 1 $\frac{5}{16}$
1 $\frac{1}{4}$ × 1 $\frac{3}{8}$
1 $\frac{1}{4}$ × 1 $\frac{7}{16}$
1 $\frac{3}{8}$ × 1 $\frac{1}{2}$
1 $\frac{7}{16}$ × 1 $\frac{1}{2}$
1 $\frac{5}{8}$ × 1 $\frac{13}{16}$
1 $\frac{7}{8}$ × 2
2 $\frac{3}{16}$ × 2 $\frac{3}{8}$