

INTERNATIONAL STANDARD

**ISO
4095**

Second edition
1998-03-15

Aerospace — Bihexagonal drives — Wrenching configuration — Metric series

Aéronautique et espace — Entraînements bihexagonaux — Série métrique



Reference number
ISO 4095:1998(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 4095 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 4, *Aerospace fastener systems*.

This second edition cancels and replaces the first edition (ISO 4095:1978), of which it constitutes a technical revision.

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

Aerospace — Bihexagonal drives — Wrenching configuration — Metric series

1 Scope

This International Standard specifies the metric wrenching configuration dimensions of bihexagonal drives.

This is a design standard.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 286-2:1988, *ISO system of limits and fits — Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts*.

3 Configuration and dimensions

See figure 1 and table 1. Dimensions and tolerances are expressed in millimetres.

Variations in size, form and position of the bihexagon are permitted within the wrenching length, provided that the actual profile falls within the maximum and minimum material conditions shown in figure 1.

Dimensions are prior to forming the locking element on self-locking nuts.

4 Designation

The drive designation shall be as follows:

Drive standard ————— ISO 4095-05
Wrenching dash number (see table 1) —————

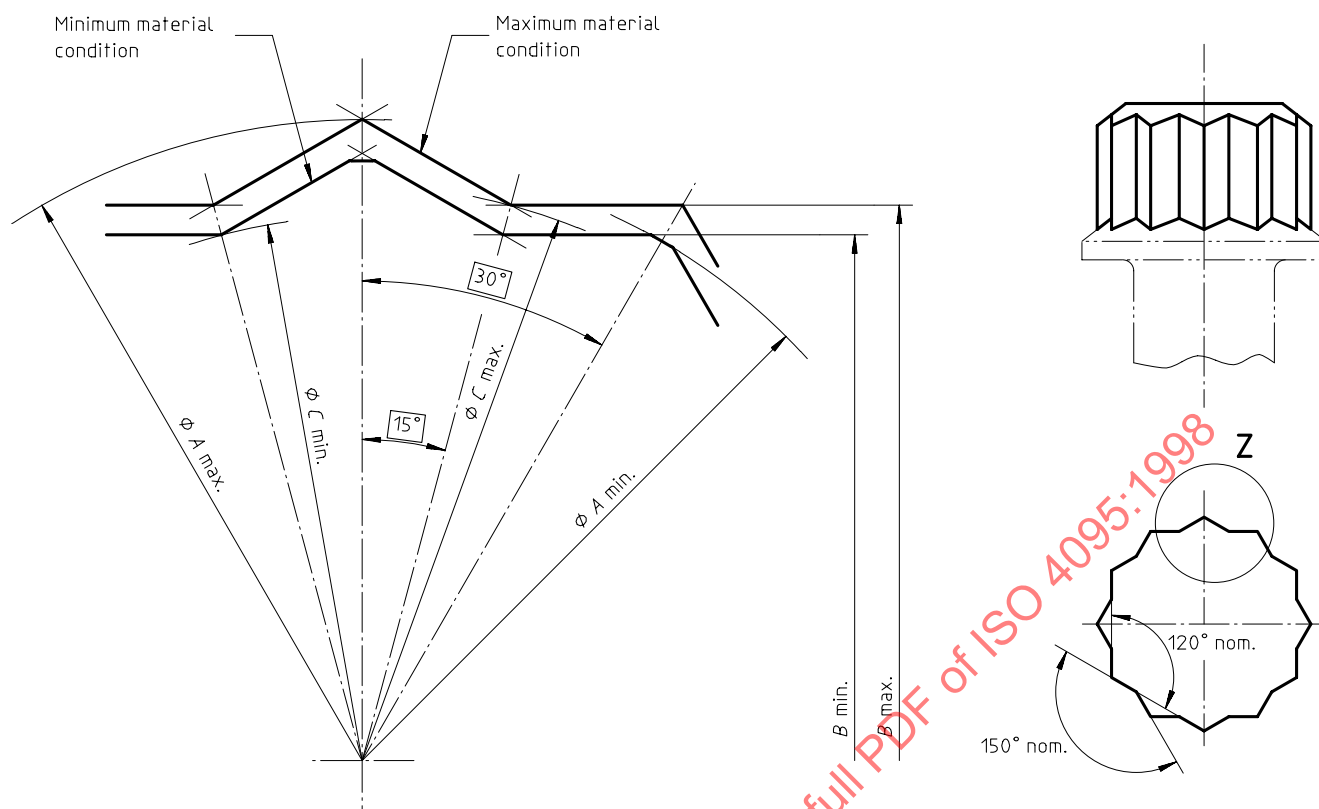


Figure 1

Table 1

Wrenching dash number	Maximum material condition			Minimum material condition		
	A max. 1)	B max. 2)	C max. 3)	A min. 4)	B min. 2)	C min. 5)
05	5,77	5	5,22	5,54	4,88	5,05
06	6,93	6	6,26	6,67	5,88	6,09
07	8,08	7	7,30	7,77	6,85	7,09
08	9,24	8	8,34	8,91	7,85	8,13
09	10,39	9	9,39	10,04	8,85	9,16
10	11,55	10	10,43	11,18	9,85	10,20
12	13,86	12	12,52	13,42	11,82	12,24
14	16,17	14	14,60	15,65	13,73	14,21
17	19,63	17	17,73	19,07	16,73	17,32
19	21,94	19	19,82	21,28	18,67	19,33
22	25,40	22	22,95	24,70	21,67	22,43
24	27,71	24	25,03	26,98	23,67	24,50
27	31,18	27	28,16	30,40	26,67	27,61
30	34,64	30	31,29	33,82	29,67	30,72
32	36,95	32	33,38	36,04	31,61	32,73
36	41,57	36	37,55	40,60	35,61	36,87

1) $A \text{ max.} = 1,154 \sqrt{B \text{ max.}}$
 2) Width across flats dimension, tolerance:
 — h12 (see ISO 286-2) for $B \leq 12$;
 — h13 (see ISO 286-2) for $B > 12$.
 3) $C \text{ max.} = 1,043 B \text{ max.}$
 4) $A \text{ min.} = 1,135 B \text{ min.}$ for wrenching dash number ≤ 12
 $A \text{ min.} = 1,14 B \text{ min.}$ for wrenching dash number > 12
 5) $C \text{ min.} = 1,035 \sqrt{B \text{ min.}}$