SLOVENSKI STANDARD
SIST EN 3711:2008

01-julij-2008

Aeronavtika - Ključi za vijake - Obojestranski, biheksagonalni - Ravni, kolenasti, zviti

Aerospace series - Wrench-double ended, bi-hexagonal - Straight, cranked, offset

Luft- und Raumfahrt - Doppelringschlüssel, Doppelsechskant - Gerade, abgewinkelt, flach gekröpft

Série aérospatiale - Clé bihexagonale, double, droite, inclinée, contre coudée

Ta slovenski standard je istoveten z: **EN 3711:2008**

ICS:

49.030.99	Drugi vezni elementi	Other fasteners

SIST EN 3711:2008 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3711

April 2008

ICS 25.140.30

English Version

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 3711:2008: E

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Foreword

This document (EN 3711:2008) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

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1 Scope

This standard specifies the properties of the following types of double end box wrenches: double head flat, double head offset and double end modified offset.

2 Normative references

The following referenced documents are indispensable for the application 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*

EN 2424, *Aerospace series — Marking of aerospace products*[1)]

EN 3709, *Aerospace series — Wrenches and sockets, bi-hexagonal — Technical specification*

3 Requirements

3.1 Configuration, dimensions, tolerances

— See Figures 1, 2 and 3 and Table 1;

— tolerances for wrench openings according to ISO 691.

3.2 Material

The material quality is left at the manufacturer's option.

3.3 Hardness

The hardness test shall be performed in compliance with the requirements given in EN 3709.

The hardness required for double head flat wrenches is as follows: 42 ≤ HRC ≤ 54.

3.4 Surface treatment

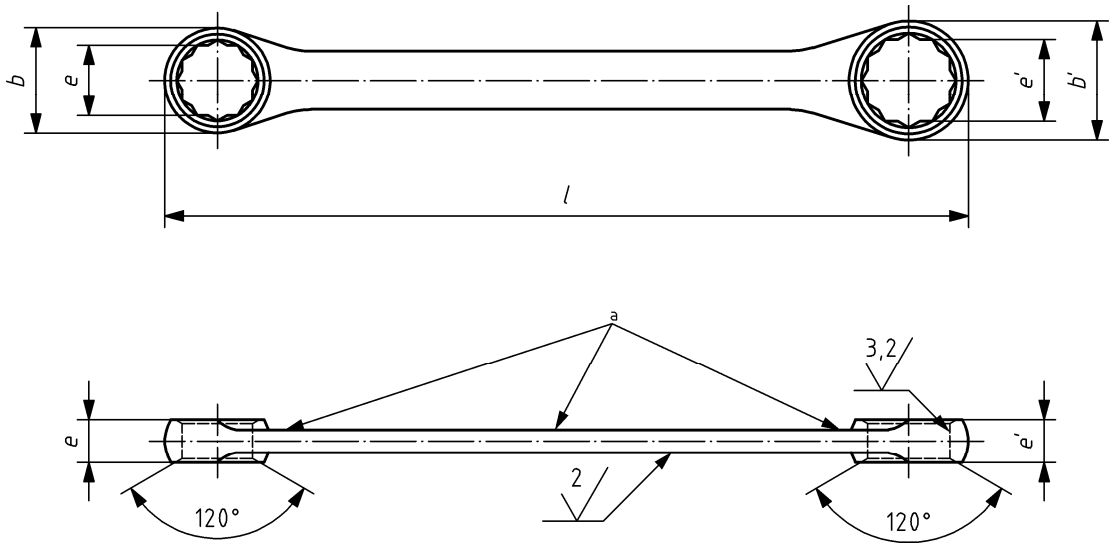
Nickel chromium deposit

— Nickel thickness 5 µm min.

— Chromium thickness 0,25 µm min.

1) Published as AECMA prestandard at the date of publication of this standard.

SHAPE CODE A



a Marking

Figure 1 — Box wrench flat

SHAPE CODE B

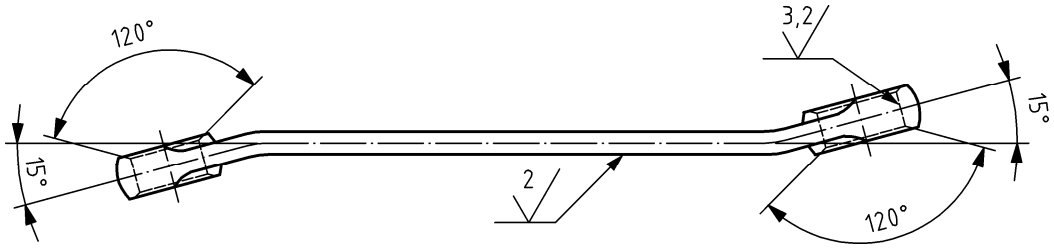


Figure 2 — Box wrench 15° offset

SHAPE CODE C

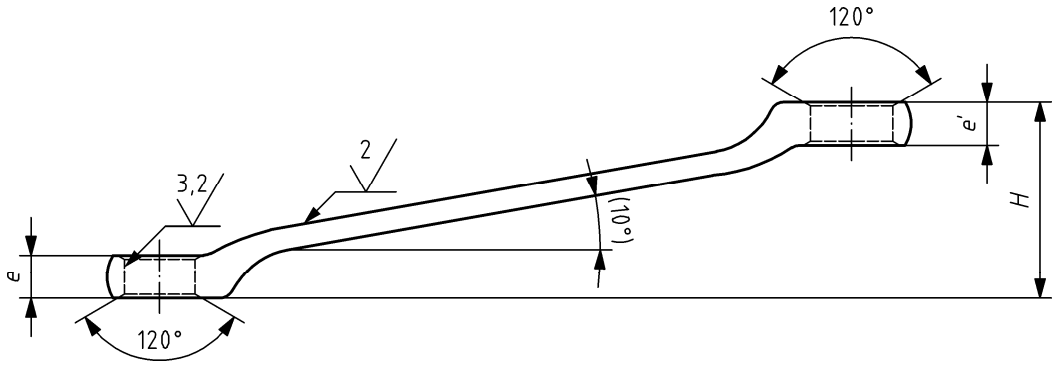


Figure 3 — Box wrench modified offset

Table 1 — Dimensions

Code	s_1 mm	s_2 mm	e mm max.	e' mm max.	b mm max.	b' mm max.	l mm min.	l mm max.	H mm
67	6	7	5	5,5	∅ 10	∅ 11	150	170	44
89	8	9	6	7	∅ 12,4	∅ 13,8	160	180	48
1 011	10	11	8	8,5	∅ 15,5	∅ 16,7	180	200	52
1 012	10	12	8	9	∅ 15,5	∅ 18,3	185	205	56
1 417	14	17	9,5	11	∅ 20,7	∅ 25	215	255	68
1 922	19	22	12	13	∅ 27,6	∅ 31,5	280	320	85

4 Designation

EXAMPLE

Description block	Identity block
Double hex wrench	EN 3711 — B — 89

Number of EN standard

Shape code (see Figures 1, 2 and 3)

Code of dimension across flat

If necessary the originator code I9005 shall be placed between the description block and the identity block.