SLOVENSKI STANDARD
oSIST prEN 2997-012:2023

01-april-2023

Aeronavtika - Konektorji, električni, okrogli, priključeni z navojnim obročkom, odporni ali neodporni proti ognju, s stalno delovno temperaturo med –65 °C in 175 °C, stalno 200 °C, najvišjo 260 °C - 012. del: Šestroba matica za pritrditev z eno luknjo - Standard za proizvod

Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures - 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak - Part 012: Jam-nut for jam-nut receptacles - Product standard

Luft- und Raumfahrt - Elektrische Rundsteckverbinder mit Schraubkupplung, feuerbeständig oder nicht feuerbeständig, Betriebstemperaturen -65 °C bis 175 °C konstant, 200 °C konstant, 260 °C Spitze - Teil 012: Sechskantmutter für festen Steckverbinder mit Mutternbefestigung - Produktnorm

Série aérospatiale - Connecteurs électriques circulaires à accouplement par bague filetée, résistant au feu ou non, températures d'utilisation –65 °C à 175 °C continu, 200 °C continu, 260 °C en pointe - Partie 012 : Écrou pour embase à fixation par écrou - Norme de produit

Ta slovenski standard je istoveten z: **prEN 2997-012**

ICS:

31.220.10	Vtiči in vtičnice, konektorji	Plug-and-socket devices. Connectors
49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

oSIST prEN 2997-012:2023 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 2997-012

February 2023

ICS 49.060

Will supersede EN 2997-012:2009

English Version

Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures - 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak - Part 012: Jam-nut for jam-nut receptacles - Product standard

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Luft- und Raumfahrt - Elektrische Rundsteckverbinder mit Schraubkupplung, feuerbeständig oder nicht feuerbeständig, Betriebstemperaturen -65 °C bis 175 °C konstant, 200 °C konstant, 260 °C Spitze - Teil 012: Sechskantmutter für festen Steckverbinder mit Mutternbefestigung - Produktnorm

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (prEN 2997-012:2023) 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 document 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 document is currently submitted to the CEN Enquiry.

This document will supersede EN 2997-012:2009.

1 Scope

This document specifies the characteristics of jam-nuts for jam-nut receptacles in the family of circular electrical connectors coupled by threaded ring.

It applies to class defined in Table 3.

For receptacles using these jam-nuts, see EN 2997-004, and EN 2997-006 for class SE only.

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.

EN 2997-001, *Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures - 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak - Part 001: Technical specification*

EN 2997-002, *Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures - 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak - Part 002: Specification of performance and contact arrangements*[1] *)*

PN-ISO 263, *ISO inch screw threads — General plan and selection for screws, bolts and nuts — Diameter range 0,06 to 6 in*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 2997-001 apply.

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

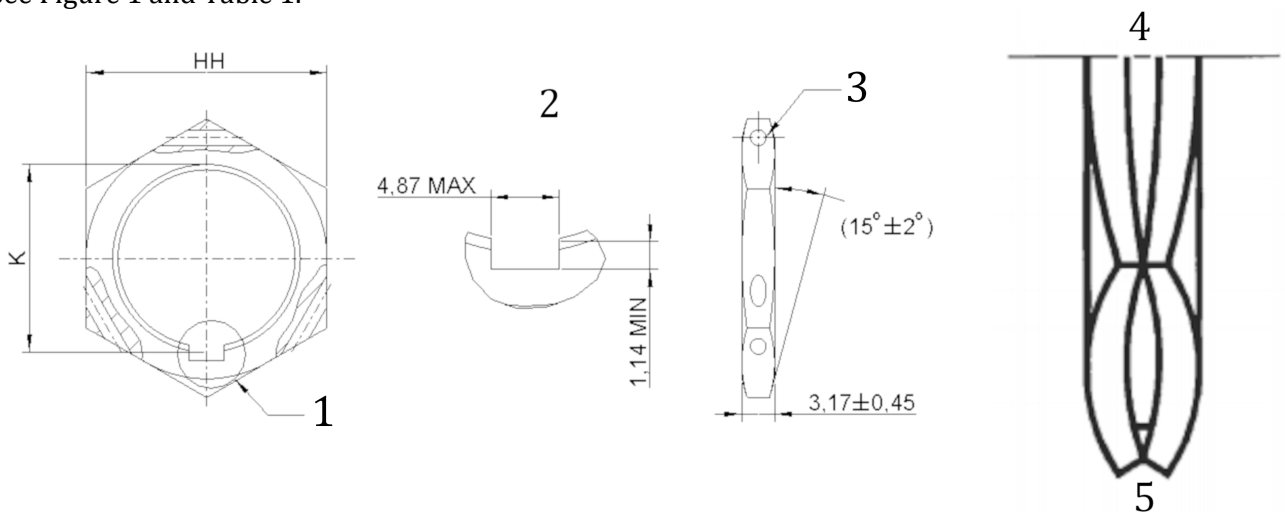
- IEC Electropedia: available at https://www.electropedia.org/

[1] Published as ASD-STAN Standard at the date of publication of this document by AeroSpace and Defence industries Association of Europe — Standardization (ASD-STAN), https://www.asd-stan.org/.

4 Required characteristics

4.1 Dimensions

See Figure 1 and Table 1.



Key

1	Detail A, optional design slot
2	Detail A, scale 4/1
3	3 holes min. ∅ 1,07 min. equally spaced
4	Optional design
5	Slot with close edges for the nut
NOTE	See Table 2 for number of slots allowed.

Figure 1

Table 1

Housing size	***K*** **Thread class 2B** [a]	***HH***
08	0,6250-20UN	21,06 20,19
10	0,7500-20UNEF	24,23 23,37
12	**0,9375-20UNEF**	29,01 28,14
14	1,0000-20UNEF	30,61 29,74
16	1,1250-18UNEF	33,76 32,89
18	1,2500-18UNEF	36,96 36,09
20	1,3750-18UNEF	40,11 39,24
22	1,5000-18UNEF	43,31 42,44
24	1,6250-18UNEF	46,46 45,59
28	1,8750-16UNS	54,41 53,54

[a] PN-ISO 263.

Table 2

Housing size	*Quantity max of slots*
08	0
10	0
12	0
14	1
16	1
18	1
20	1
22	1
24	1
28	0

4.2 Material, surface treatment

See Table 3.

Table 3

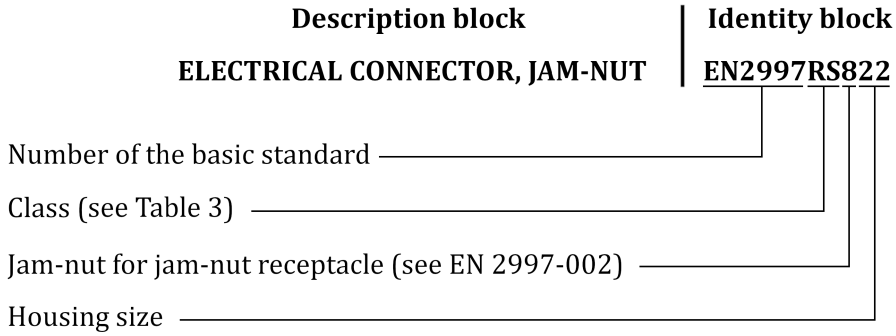
Class	Model description
WS	Jam-nut for receptacle with housing (shell) in olive-green, cadmium-plated aluminium alloy, conducting finish, 500 h resistance to salt mist, maximum operating temperature 175 °C continuous.
RS	Jam-nut for receptacle with housing (shell) in nickel-plated aluminium alloy, 48 h resistance to salt mist, maximum operating temperature 200 °C continuous.
SE	Jam-nut for receptacle with housing (shell) in passivated stainless steel, fire-resistant, 500 h resistance to salt mist, maximum operating temperature 260 °C peak.
NOTE SE class jam-nut are used for both S, SE, Y and YE classes jam-nut receptacles.	

4.3 Main general characteristics

It shall be in accordance with EN 2997-002.

5 Designation

EXAMPLE



6 Marking

Not applicable.

7 Technical specification

It shall be in accordance with EN 2997-001.

Bibliography

EN 2997-004, *Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures - 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak - Part 004: Jam-nut mounted receptacle - Product standard*

EN 2997-006, *Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures - 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak - Part 006: Hermetic jam-nut mounted receptacle - Product standard*