
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 - 004. del: Pritrditev z zaklepom matice - 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 004: Jam-nut mounted receptacle - 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 004: Fester Steckverbinder mit Mutterbefestigung - Produktnorm

<https://standards.iteh.ai/catalog/standards/sist/32d428e5-3127-4684-8820-000110000001/pr-en-2997-004>

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 004 : Embase à fixation par écrou - Norme de produit

Ta slovenski standard je istoveten z: prEN 2997-004

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 2997-004:2022

en,fr,de

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2022](https://standards.iteh.ai/catalog/standards/sist/32d428e5-ca63-46c6-84fa-f092d184d58e/osist-pren-2997-004-2022)

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 2997-004

April 2022

ICS 49.060

Will supersede EN 2997-004:2006

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 004: Jam-nut mounted
receptacle - Product standard**

Série aérospatiale - Connecteurs électriques circulaires
à accouplement par bague fileté, résistant au feu ou
non, températures d'utilisation - 65 °C à 175 °C
continu, 200 °C continu, 260 °C en pointe - Partie 004 :
Embase à fixation par écrou - Norme de produit

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 004:
Fester Steckverbinder mit Mutterbefestigung -
Produktnorm

EUROPEAN STANDARD
PREVIEW
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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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[https://standards.iteh.ai/catalog/standards/sist/32d428e5-
ca63-46c6-84fa-f092d184d58e/osist-pren-2997-004-
2022](https://standards.iteh.ai/catalog/standards/sist/32d428e5-ca63-46c6-84fa-f092d184d58e/osist-pren-2997-004-2022)

European foreword

This document (prEN 2997-004:2022) 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-STAN, prior to its presentation to CEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 2997-004:2006.

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[https://standards.iteh.ai/catalog/standards/sist/32d428e5-
ca63-46c6-84fa-f092d184d58e/osist-pren-2997-004-
2022](https://standards.iteh.ai/catalog/standards/sist/32d428e5-ca63-46c6-84fa-f092d184d58e/osist-pren-2997-004-2022)

prEN 2997-004:2022 (E)**1 Scope**

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

It applies to the class defined in Table 4.

For contacts, filler plugs, and rear accessories associated with this receptacle, see EN 2997-002. For plugs and protective covers, see EN 2997-008 and EN 2997-009 respectively. For spare jam-nuts and o-rings, see EN 2997-012 and EN 2997-013 respectively.

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*

3 Terms and definitions

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

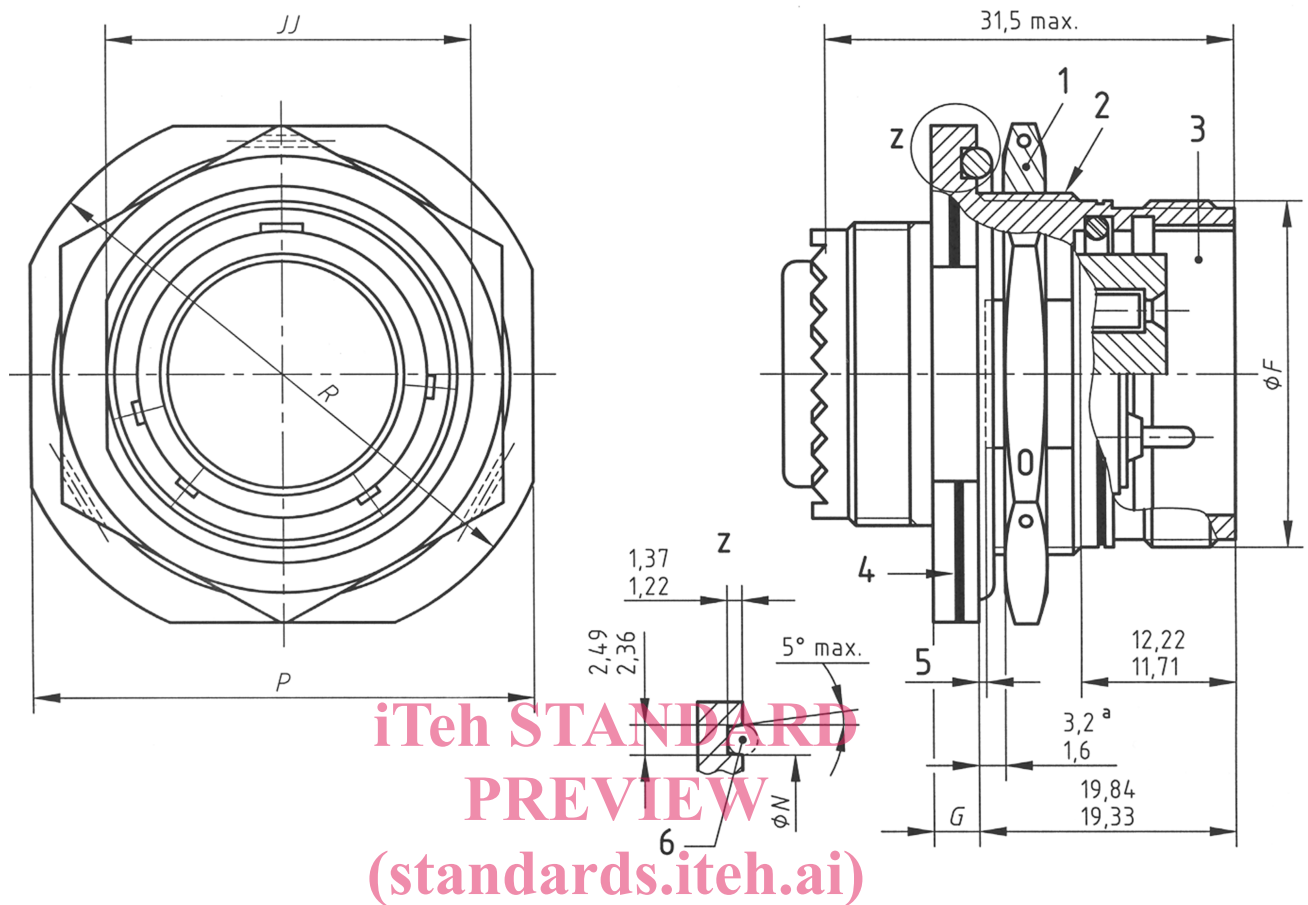
ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
<https://standards.iteh.ai/catalog/standards/sist/32d428e5-163-4c66-846c-0921184158/osist-pr-en-2997-004-2022>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Required characteristics**4.1 Dimensions and mass**

See Figure 1 and Table 1.

Dimensions are in millimetres; they apply after surface treatment.

**Key**

- 1 see EN 2997-012
- 2 thread *K* <https://standards.iteh.ai/catalog/standards/sist/32d428e5-ca63-46c6-84fa-f092d184d58e/osist-pren-2997-004-2022>
- 3 see EN 2997-001
- 4 blue colour band minimum width 0,64
- 5 end of flat 0,13 max.
- 6 see EN 2997-013

Figure 1 — Dimensions

Table 1 — Jam-nut receptacle dimensions and weight

Housing size	F max.	G	K Thread class 2A ^a	N	P	R	JJ	Mass ^b g max.	
								Stainless steel	Aluminium alloy
08	14,27	3,48 2,46	0,6250-20UN	17,02 16,92	24,89 24,10	27,38 26,59	15,14 14,99	32	15
10	17,67	3,48 2,46	0,7500-20UNEF	20,22 20,12	28,04 27,25	30,28 29,49	18,31 18,16	41	21
12	22,22	3,48 2,46	0,9375-20UNEF	24,99 24,89	32,79 32,00	35,05 34,26	23,06 22,91	58	30
14	23,77	3,48 2,46	1,0000-20UNEF	26,57 26,47	35,33 34,54	38,51 37,72	24,66 24,51	68	35
16	26,97	3,48 2,46	1,1250-18UNEF	29,74 29,64	38,51 37,72	41,68 40,89	27,84 27,69	82	46
18	30,15	3,48 2,46	1,2500-18UNEF	32,92 32,82	41,68 40,89	44,86 44,07	30,99 30,84	88	51
20	33,32	3,48 2,46	1,3750-18UNEF	37,64 37,54	44,86 44,07	49,63 48,84	34,16 34,01	100	56
22	36,49	3,76 3,25	1,5000-18UNEF	40,87 40,77	49,63 48,84	52,78 51,99	37,34 37,19	123	69
24	39,67	3,76 3,25	1,6250-18UNEF	43,99 43,89	52,81 52,02	55,42 54,66	40,51 40,36	137	82
28	46,02	3,76 3,25	1,8750-16UNS	50,39 50,29	59,21 58,42	61,82 61,04	46,78 46,63	191	120

^a ISO 263

^b Mass without accessory and without contact

4.2 Tightening torque of attachment nut

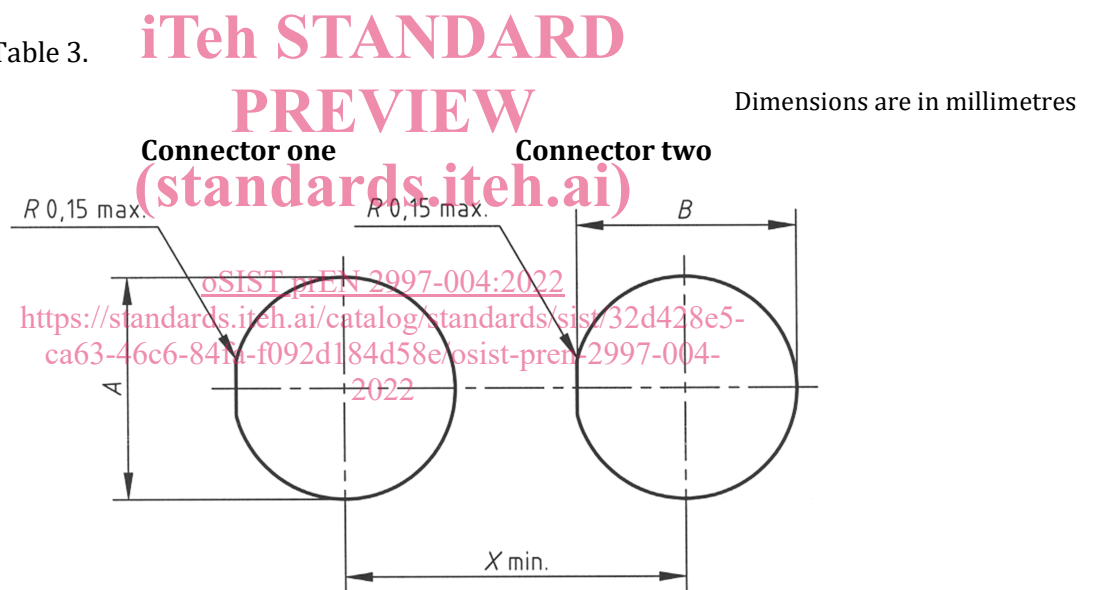
For recommended service use, torque settings to be in accordance with Table 2.

Table 2 — Tightening torque values

Housing size	Torque in N.m \pm 10 %
08	7
10	10
12	12
14	15
16	18
18	22
20	25
22	27
24	29
28	30

4.3 Panel cut-out

See Figure 2 and Table 3.



X min. value is calculated as follows: $D/2$ connector one + $D/2$ connector two. (See Table 3 for value D)

Figure 2 — Panel cut-out dimensions

Table 3 — Panel cut-out dimensions

Housing size	A	B	D min.
08	16,26 16,00	15,50 15,24	31,70
10	19,43 19,17	18,67 18,41	34,90
12	24,18 23,92	23,42 23,16	39,60
14	25,78 25,52	25,02 24,76	41,25
16	28,96 28,70	28,20 27,94	44,45
18	32,13 31,87	31,25 30,99	47,35
20	35,31 35,05	34,42 34,16	51,90
22	38,48 38,22	37,59 37,33	54,10
24	41,66 41,40	40,77 40,51	57,25
28	48,01 47,75	47,14 46,88	65,25

4.4 Material, surface treatment

See Table 4.

4.5 Main general characteristics

Main general characteristics shall be as specified in EN 2997-002.

4.6 Possible combinations of plugs and receptacles

Possible combinations of plugs and receptacles shall be as specified in EN 2997-002.