

SLOVENSKI STANDARD

SIST EN 2997-6:2001

01-januar-2001

Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures 175°C continuous, 200°C continuous, 260°C peak - Part 6: Hermetic jam-nut mounted receptacle - Product standard

Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures 175°C continuous, 200°C continuous, 260°C peak - Part 6: Hermetic jam-nut mounted receptacle - Product standard

iTeh STANDARD PREVIEW

(standards.iteh.ai)

Luft- und Raumfahrt - Elektrische Rundsteckverbinder mit Schraubkupplung, feuerbeständig oder nicht feuerbeständig, Betriebstemperaturen 175°C konstant, 200°C konstant, 260°C Spitze - Teil 6: Hermetischer fester Steckverbinder mit Mutternbefestigung - Produktnorm

Série aérospatiale - Connecteurs électriques circulaires a accouplement par bague filetée, résistant au feu ou non, températures d'utilisation 175°C continu, 200°C continu, 260°C en pointe - Partie 6: Embase hermétique a fixation par écrou - Norme de produit

Ta slovenski standard je istoveten z: EN 2997-6:1997

ICS:

49.060 Štečno električno opremljanje in sistemi Aerospace electric equipment and systems

SIST EN 2997-6:2001

en

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

[SIST EN 2997-6:2001](#)

<https://standards.iteh.ai/catalog/standards/sist/f0c883f2-d223-49b2-abee-8720e64196a2/sist-en-2997-6-2001>

EUROPEAN STANDARD

EN 2997-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 1997

ICS 49.060

Descriptors: aircraft industry, connecting equipment, electric connectors, fixing, nuts : fasteners, bed plates, specifications

English version

**Aerospace series - Connectors, electrical, circular,
coupled by threaded ring, fire-resistant or non
fire-resistant, operating temperatures 175°C
continuous, 200°C continuous, 260°C peak -
Part 6: Hermetic jam-nut mounted receptacle -
Product standard**

Série aérospatiale - Connecteurs électriques
circulaires à accouplement par bague filetée,
résistant au feu ou non, températures
d'utilisation 175°C continu, 200°C continu
260°C en pointe - Partie 6: Embase hermétique
à fixation par écrou - Norme de produit

Luft- und Raumfahrt - Elektrische
Rundsteckverbinder mit Schraubkupplung,
feuerbeständig oder nicht feuerbeständig,
Betriebstemperaturen 175°C konstant, 200°C
konstant, 260°C Spitze - Teil 6: Hermetischer
fester Steckverbinder mit Mutternbefestigung -
Produktnorm

[SIST EN 2997-6:2001](#)

<https://standards.iteh.ai/catalog/standards/sist/10c883f2-d223-49b2-abee-8720c64196a2/sist-en-2997-6-2001>

This European Standard was approved by CEN on 1996-08-04. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Page 2
EN 2997-6:1997

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 AECMA, 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 December 1997, and conflicting national standards shall be withdrawn at the latest by December 1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

ALIMENTATION AVANTAGEUSE
https://standards.cen.europa.eu/standards/sist/en/8830_4223-49b2-abec-87206419642/sist-en-2997-6-2001
COUNCIL OF EUROPEAN STANDARDS
CEN

.....
COUNCIL OF EUROPEAN STANDARDS
CEN

1 Scope

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

It applies to the models defined in table 5.

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.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

| | |
|-------------|--|
| EN 2997-001 | Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures 175 °C continuous, 200 °C continuous, 260 °C peak - Part 001 : Technical specification ¹⁾ |
| EN 2997-002 | Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures 175 °C continuous, 200 °C continuous, 260 °C peak - Part 002 - Specification of performance and contact arrangements ¹⁾ |
| EN 2997-008 | Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures 175 °C continuous, 200 °C continuous, 260 °C peak - Part 008 : Plug - Product standard ¹⁾ |
| EN 2997-009 | Aerospace series - Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures 175 °C continuous, 200 °C continuous, 260 °C peak - Part 009 : Protective cover for receptacle - Product standard ¹⁾ |

FED-STD-H28 : 1978 Screw-thread standards for federal services ²⁾

3 Terminology

See EN 2997-001.

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

2) Published by : Department of Defense (DOD), the Pentagon, Washington, D.C. 20301 USA

4 Required characteristics

4.1 Dimensions, mass

See figure 1 and table 1.

Dimensions are in millimeters ; they apply after surface treatment.

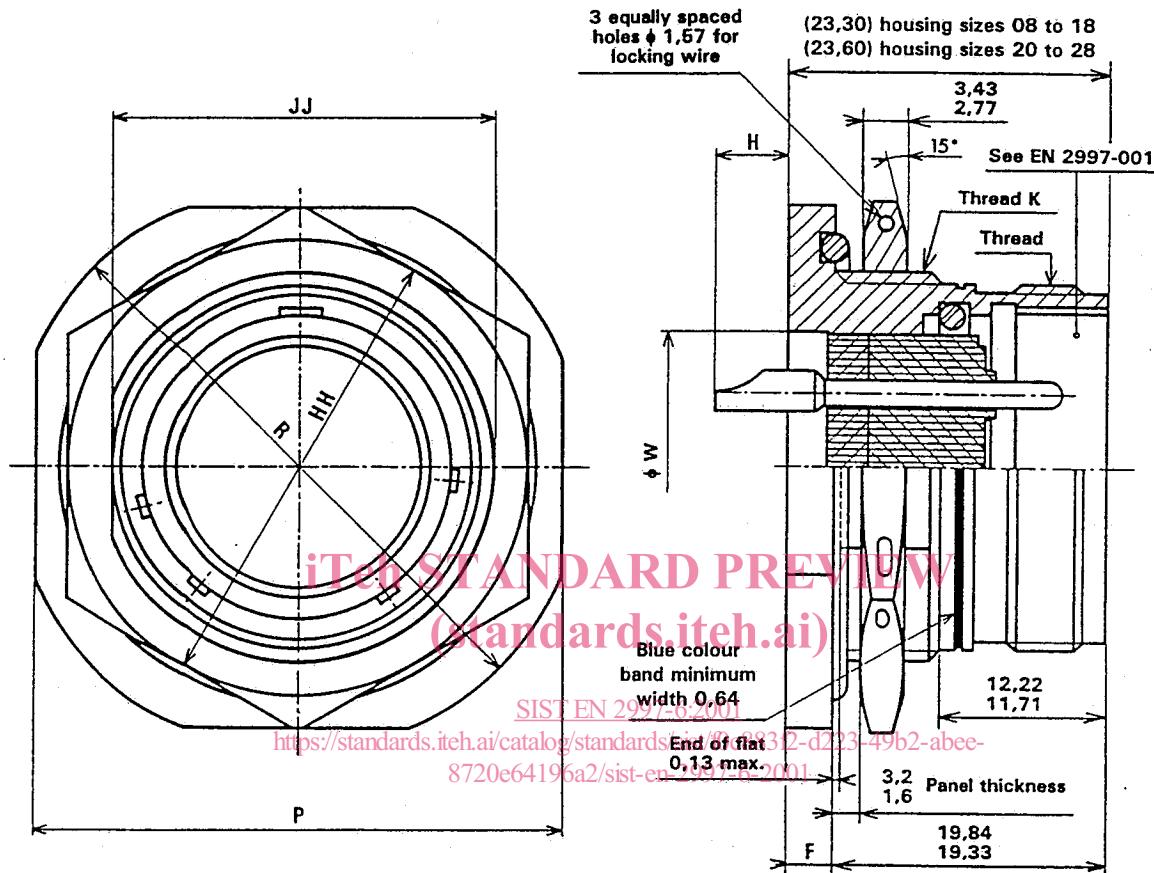


Figure 1

Table 1

| Housing size | F | Contacts 20 | H Contacts 16 and 20 | K Thread class 2A ¹⁾ | P | R | W min. | HH | JJ | Mass g max. |
|--------------|--------------|--------------|----------------------|---------------------------------|----------------|----------------|--------|----------------|----------------|-------------|
| 08 | 3,48 2,46 | 4,57 3,05 | 5,33 3,81 | 0,6250-20UN | 24,89 24,10 | 27,38 26,59 | 10,16 | 21,06 20,19 | 15,14 14,99 | 29 |
| 10 | 3,48 2,46 | | | 0,7500-20UNEF | 28,04 27,25 | 30,28 29,49 | 10,44 | 24,23 23,37 | 18,31 18,16 | 37 |
| 12 | 3,48 2,46 | | | 0,9380-20UNEF | 32,79 32,00 | 35,05 34,26 | 14,76 | 29,01 28,14 | 23,06 22,91 | 50 |
| 14 | 3,48 2,46 | | | 1,0000-20UNEF | 35,33 34,54 | 38,51 37,72 | 16,51 | 30,61 29,74 | 24,66 24,51 | 58 |
| 16 | 3,48 2,46 | | | 1,1250-18UNEF | 38,51 37,72 | 41,68 40,89 | 19,74 | 33,76 32,89 | 27,84 27,69 | 72 |
| 18 | 3,48 2,46 | | | 1,2500-18UNEF | 41,68 40,89 | 44,86 44,07 | 21,95 | 36,96 36,09 | 30,99 30,84 | 79 |
| 20 | 3,48 2,46 | | | 1,3750-18UNEF | 44,86 44,07 | 49,63 48,84 | 26,26 | 40,11 39,24 | 34,16 34,01 | 87 |
| 22 | 3,76 3,25 | 4,29 2,77 | 5,05 3,53 | 1,5000-18UNEF | 49,63 48,84 | 52,78 51,99 | 28,78 | 43,31 42,44 | 37,34 37,19 | 108 |
| 24 | 3,76 3,25 | | | 1,6250-18UNEF | 52,81 52,02 | 55,42 54,66 | 32,61 | 46,46 45,59 | 40,51 40,36 | 122 |
| 28 | 3,76 3,25 | | | 1,8750-16UN | 59,21 58,42 | 61,82 61,04 | 38,81 | 54,41 53,54 | 46,78 46,63 | 180 |

1) FED-STD-H28

4.2 Tightening torque of attachment nut

See table 2.

Table 2

| 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.
Dimensions are in millimeters.

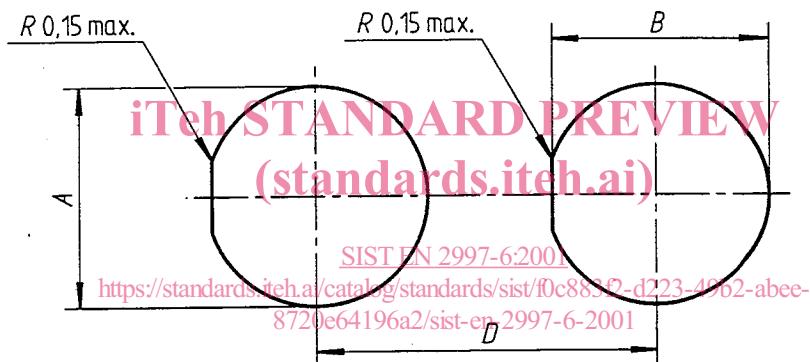


Figure 2

Table 3

| 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 | 48,00 47,75 | 47,14 46,88 | 65,25 |

4.4 Material, surface treatment

See table 5.

4.5 Main general characteristics

See EN 2997-002.

4.6 Possible combinations of plugs and receptacles

See table 4.

Table 4

| | | |
|-------------|--------|----------|
| Receptacles | Y | YE |
| Plugs | K or S | KE or SE |

5 Designation

EXAMPLE :

| Description block | Identity block |
|--|-----------------|
| iTeh STANDARD PREVIEW ELECTRICAL CONNECTOR, RECEPTACLE (standards.iteh.ai) | EN2997YE72219M9 |
| Number of the basic standard _____ SIST EN 2997-6:2001 | |
| Model (see table 5) _____ https://standards.iteh.ai/catalog/standards/sist/f0c883f2-d223-49b2-abec-8720e64196a2/sist-en-2997-6-2001 | |
| Hermetic jam-nut mounted receptacle (see EN 2997-002) _____ | |
| Housing size and contact arrangement (see EN 2997-002) _____ | |
| Type of contact : M : male _____ | |
| Polarization (see EN 2997-002) _____ | |

NOTE : If necessary, the code I9005 shall be placed between the description block and the identity block.

Table 5 : Connector models

| Models | Description |
|--------|--|
| Y | Hermetic receptacle with housing (shell) in passivated stainless steel, solder contacts, maximum operating temperature 200 °C continuous |
| YE | Hermetic receptacle with housing (shell) in passivated stainless steel, solder contacts, maximum operating temperature 260 °C peak |