

# SLOVENSKI STANDARD

## SIST EN 3646-006:2018

01-november-2018

Nadomešča:

SIST EN 3646-006:2009

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**Aeronavtika - Konektorji, električni, okrogli, bajonetno sklapljanje, stalna delovna temperatura 175 °C ali 200 °C - 006. del: Podloga, hermetična, pritrjena z matico - Standard za proizvod**

Aerospace series - Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous - Part 006: Receptacle, hermetic, jam-nut mounting - Product standard

Luft- und Raumfahrt - Elektrische Rundsteckverbinder mit Bajonettkupplung, Betriebstemperatur 175 °C oder 200 °C konstant - Teil 006: Hermetischer fester Steckverbinder mit Mutterbefestigung - Produktnorm

Série aérospatiale - Connecteurs électriques circulaires à accouplement par baïonnettes, température d'utilisation 175 °C ou 200 °C continu - Partie 006 : Embase hermétique à fixation par écrou - Norme de produit

**Ta slovenski standard je istoveten z: EN 3646-006:2018**

**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

**SIST EN 3646-006:2018**

**en,fr,de**

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EUROPEAN STANDARD

EN 3646-006

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2018

ICS 49.060

Supersedes EN 3646-006:2006

English Version

**Aerospace series - Connectors, electrical, circular, bayonet  
coupling, operating temperature 175 °C or 200 °C  
continuous - Part 006: Receptacle, hermetic, jam-nut  
mounting - Product standard**

Série aérospatiale - Connecteurs électriques circulaires  
à accouplement par baïonnettes, température  
d'utilisation 175 °C ou 200 °C continu - Partie 006 :  
Embase hermétique à fixation par écrou - Norme de  
produit

Luft- und Raumfahrt - Elektrische Rundsteckverbinder  
mit Bajonettkupplung, Betriebstemperatur 175 °C oder  
200 °C konstant - Teil 006: Hermetischer fester  
Steckverbinder mit Mutterbefestigung - Produktnorm

This European Standard was approved by CEN on 2 March 2018.

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 CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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 (EN 3646-006:2018) 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 February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 3646-006:2006.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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**EN 3646-006:2018 (E)****1 Scope**

This European Standard defines the characteristics of hermetic jam-nut mounted receptacles in the family of bayonet coupling circular connectors, intended for use in an operating temperature range of – 65 °C to 175 °C or 200 °C continuous.

It applies to models defined in Table 4.

For plugs and protective covers, see EN 3646-008 and EN 3646-009 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 3646-001, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous — Part 001: Technical specification*

EN 3646-002, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous — Part 002: Specification of performance and contact arrangements*

EN 3646-008, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous — Part 008: Plug — Product standard*

EN 3646-009, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous — Part 009: Protective cover for receptacle — Product standard*

ISO 3161, *Aerospace — UNJ threads — General requirements and limit dimensions*<sup>1)</sup>

**3 Terms and definitions**

For the purposes of this document, the terms and definitions given in EN 3646-001 apply.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

**4 Required characteristics****4.1 Dimensions and mass**

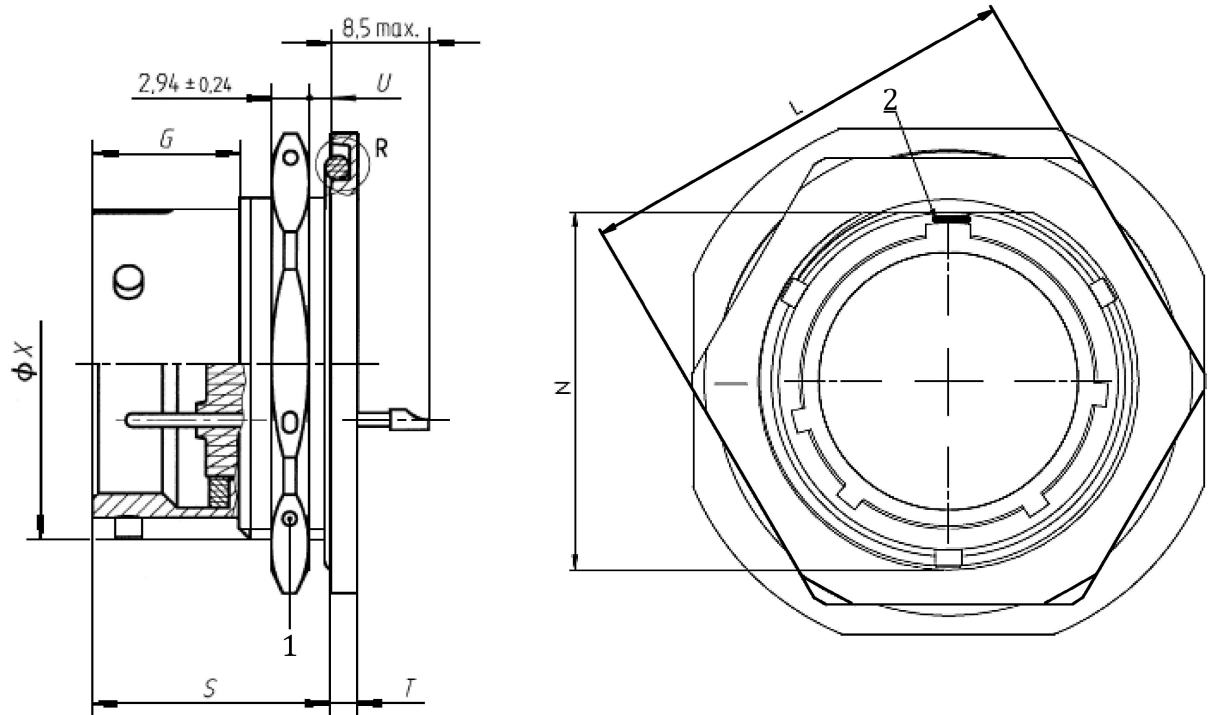
See Figure 1 and Table 1.

Dimensions and tolerances are in millimetres, they apply after surface treatment.

Interface mating dimensions, see EN 3646-001.

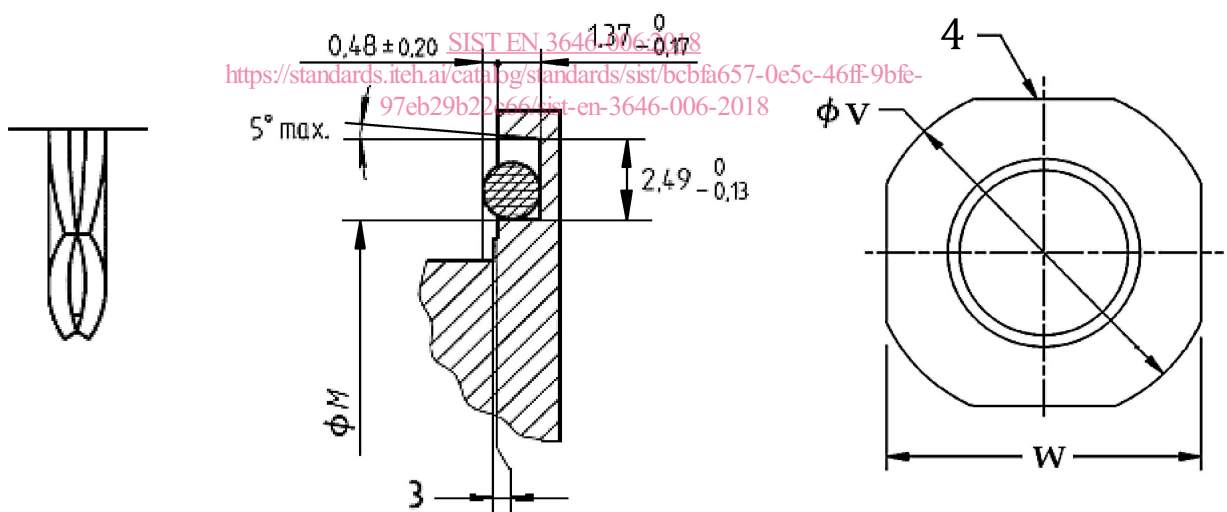
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1) Published by: International Organization for Standardization (ISO), <http://www.iso.ch/>



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**P**  
Optional design



Slot with close  
edges for the nut

**Key**

- 1 Three equally spaced holes diameter 1 mm for locking wire (see option detail P)
- 2 Polarizing strip optional colour
- 3 0,13 max. to end of the flat
- 4 Master keyway

**Figure 1 — Hermetic jam-nut mounted receptacle**

Table 1 — Round flange receptacle with nut fitting

Housing size	<i>G</i>	<i>L</i>	<i>M</i>	<i>N</i>	<i>S</i>	<i>T</i>	<i>U</i>	$\emptyset V$	<i>W</i>	<i>X</i>	<i>Y</i>	Mass g max.
	min.	max.	min.	0 − 0,25	max.	± 0,5		0 − 0,79	0 − 0,79	Thread <sup>a</sup> UNJEF-2A	max.	
08	9	19,48	15,34	13,45	18,34	2,40	4,75 1,57	27,38	24,23	0,5625-24	23,30	20
10	9	22,66	18,52	16,64				30,56	27,38	0,6875-24	26,60	26
12	9	27,41	23,25	20,78				35,33	32,16	0,8750-20	31,35	35
14	9	30,61	26,45	23,93				38,58	35,33	1,0000-20	34,65	46
16	9	33,76	29,62	27,08				41,68	38,51	1,1250-18	37,70	51
18	9	36,96	32,80	30,25				44,86	41,68	1,2500-18	40,90	63
20	9	40,11	37,55	33,43	23,12	3,20	6,35	49,63	46,43	1,3750-18	45,65	86
22	9	43,31	40,75	36,60			1,57	52,78	49,63	1,5000-18	48,85	100
24	9,5	46,46	43,92	39,78			23,95	5,56 1,57	55,96	52,78	1,6250-18	52,00

<sup>a</sup> ISO 3161.

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#### 4.2 Tightening torque of attachment nut

See Table 2.

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Table 2

Housing size	Torque N.m ± 10 %
08	7
10	10
12	12
14	15
16	18
18	22
20	25
22	27
24	29

#### 4.3 Panel cut-out

Recommended panel cut-out dimensions: see Figure 2 and Table 3.



Dimensions and tolerances are in millimetres.

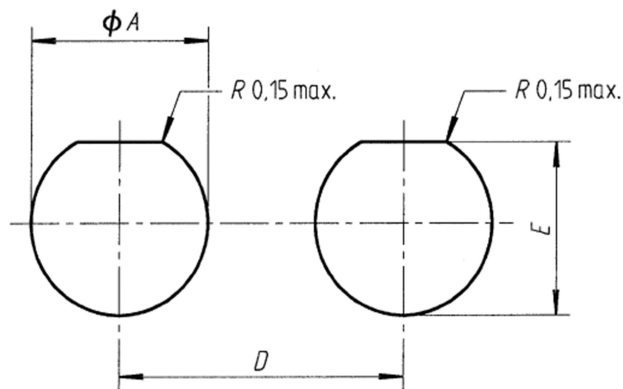


Figure 2

Table 3

Housing size	$A$ +0,25 0	$D$ min.	$E$ +0,25 0
08	14,40	32	13,48
10	17,58	35	16,66
12	22,60	38	20,80
14	25,52	41	23,95
16	28,70	45	27,10
18	31,87	47	30,27
20	35,05	51	33,45
22	38,22	53	36,62
24	41,40	57	39,80

#### 4.4 Material and surface treatment

See Table 4.

#### 4.5 Main general characteristics

See EN 3646-002.

#### 4.6 Possible combinations of plugs and receptacles

See EN 3646-002.