SLOVENSKI STANDARD
SIST EN 3645-004:2019

01-junij-2019

Nadomešča:
SIST EN 3645-004:2009

Aeronavtika - Konektorji, električni, okrogli, zaščiten kontakt, hitra spojka z navojem, stalna delovna temperatura 175 °C ali 200 °C - 004. del: Spojnik, hermetičen, s kvadratno montažno prirobnico - Standard za proizvod

Aerospace series - Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 004: Receptacle, hermetic, square flange mounting - Product standard

Luft- und Raumfahrt - Elektrische Rundsteckverbinder, kontaktgeschützt, drei-gängige Gewinde Schnellkupplung, Dauerbetriebstemperaturen 175 °C oder 200 °C - Teil 004: Fester Steckverbinder, hermetisch, mit quadratischem Montageflansch - Produktnorm

Série aérospatiale - Connecteurs électriques circulaires à contacts protégés, à accouplement par filetage à pas rapide à trois filets, températures d'utilisation 175 °C ou 200 °C continu - Partie 004 : Embase hermétique à fixation par collerette carrée - Norme de produit

Ta slovenski standard je istoveten z: **EN 3645-004:2019**

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 3645-004:2019 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3645-004

March 2019

ICS 49.060

Supersedes EN 3645-004:2006

English Version

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This European Standard was approved by CEN on 14 October 2018.

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.

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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 (EN 3645-004:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 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 3645-004:2006.

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.

1 Scope

This European Standard specifies the characteristics of square flange hermetic receptacles in the family of circular electrical connectors with triple start threaded coupling.

It applies to models in Table 3.

The contacts are unremovable and soldered termination.

For plugs and protective covers, see EN 3645-008, EN 3645-011, EN 3645-012 and EN 3645-006 respectively.

These connectors are derived from and interchangeable with model Y in specification MIL-DTL-38999/21.

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 3645-001, *Aerospace series — Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous — Part 001: Technical specification*

EN 3645-002, *Aerospace series — Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous — Part 002: Specification of performance and contact arrangements*

EN 3645-006, *Aerospace series — Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous — Part 006: Protective cover for receptacle — Product standard*

EN 3645-008, *Aerospace series — Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous — Part 008: Non release plug with grounding ring — Product standard*

EN 3645-011, *Aerospace series — Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous — Part 011: Lanyard release plug with grounding fingers — Type 1 — Product standard*

EN 3645-012, *Aerospace series — Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous — Part 012: Lanyard release plug with grounding fingers — Type 2 — Product standard*

MIL-DTL-38999/21, *Connectors, electrical, circular, threaded, receptacle, box mounting flange, hermetic, hermetic solder contacts, series III, metric*[1)]

3 Terms and definitions

For the purposes of this standard, the terms and definitions given in EN 3645-001 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

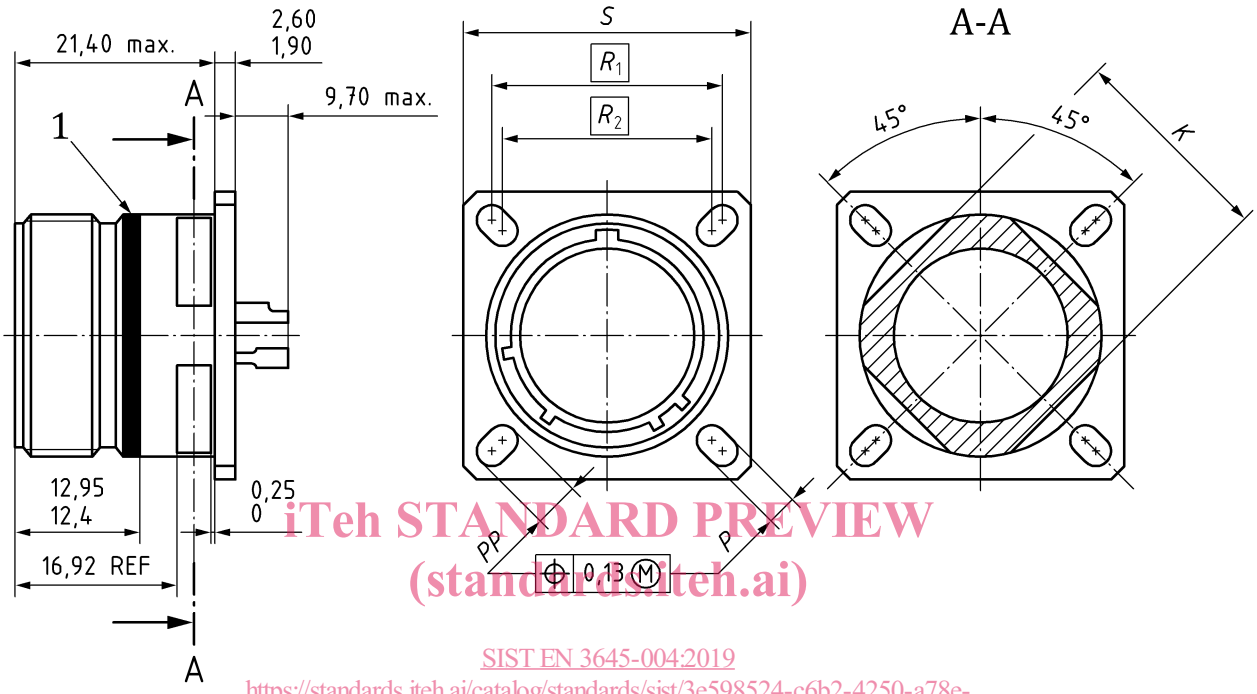
1) Published by: Department of Defense (DOD), The Pentagon, Washington D.C. 20301 USA.

4 Required characteristics

4.1 Dimensions and mass

See Figure 1 and Table 1.

Dimensions and tolerances are in millimetres.



Key

1 Red strip

Figure 1 — Square flange receptacle

Table 1 — Square flange receptacle – Dimensions

Shell size	*K* max.	*P* ± 0,20	*PP* ± 0,20	R_1	R_2	*S* ± 0,30	**Mass** g **Stainless steel** max.
09	11,84	3,25	5,49	18,26	15,09	23,80	21
11	15,01		4,93	20,62	18,26	26,20	27
13	19,08			23,01	20,62	28,60	35
15	22,25			24,61	23,01	31,00	44
17	25,43			26,97	24,61	33,30	54
19	28,60			29,36	26,97	36,50	60
21	31,78			31,75	29,36	39,70	66
23	34,95	3,91	6,15	34,93	31,75	42,90	75
25	38,13			38,10	34,93	46,00	86

4.2 Materials and surface treatment

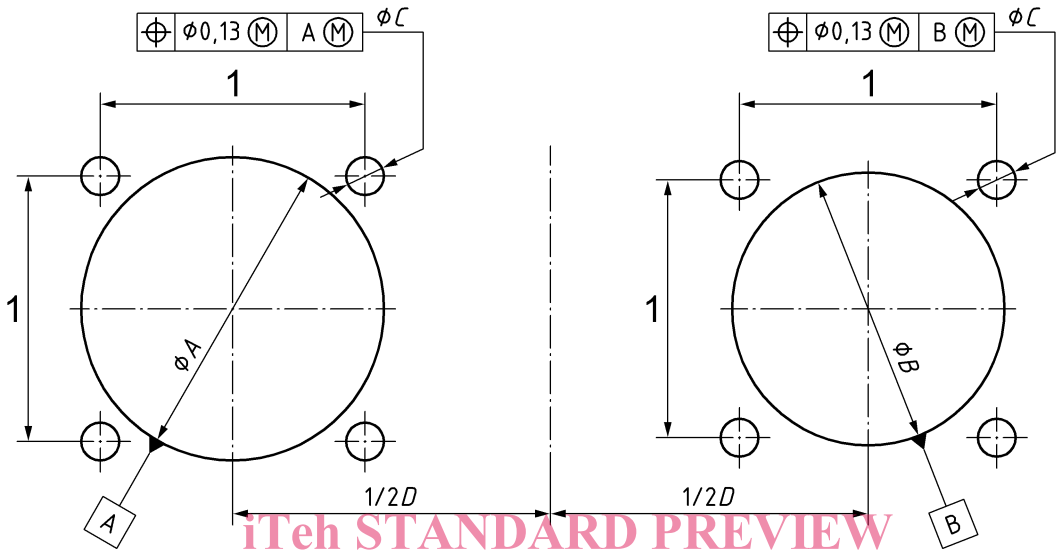
See Table 3.

4.3 Recommended panel cut-out

See Figure 2 and Table 2.

Dimensions and tolerances are in millimetres.

Front or rear panel mounted **Front panel mounted**



Key

1 R_1 or R_2

Optional panel cut-out

Rear panel mounted, thickness: 09 to 19: 5,94
21 to 25: 5,13

Figure 2 — Panel cut-out

Table 2 — Panel cut-out – Dimensions

Shell size	*A* min.	*B* min.	*C* ± 0,13	*D* min.	R_1	R_2
09	16,66	13,11	3,25	31,80	18,26	15,09
11	20,22	15,88		35,00	20,62	18,26
13	23,42	19,05		39,40	23,01	20,62
15	26,59	23,01		42,50	24,61	23,01
17	30,96	25,81		45,70	26,97	24,61
19	32,94	28,98		48,50	29,36	26,97
21	36,12	32,16		51,70	31,75	29,36
23	39,29	34,93	3,91	54,90	34,93	31,75
25	42,47	37,69		58,00	38,10	34,93

4.4 Electrical, mechanical and climatic characteristics

See EN 3645-002.

5 Designation

EXAMPLE

Description block	Identity block
ELECTRICAL CONNECTOR	EN3645-Y0GN35MA

Number of the basic standard

Model (see Table 3)

Shell code for hermetic, square flange fitting receptacle

Shell size code (see Table 4)

N: no earthed contacts

Contact arrangement (see EN 3645-002)
except those containing coaxial or quadrax contacts
or triaxial contacts or size 10 contacts

Contact code
M: male with solder cup
X: male with eyelet

Polarization: N, A, B, C, D, E

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