SLOVENSKI STANDARD
SIST EN 3645-010:2009

01-maj-2009

Aeronavtika - Konektorji, elektriļ ni, okrogli, zaġļ iten kontakt, hitra spojka z navojem, stalna delovna temperatura 175 ÁC ali 200 ÁC - 010. del: Podloga, hermetiļ na, z okroglo prirobnico, pritrjena z matico - Standard za proizvod

Aerospace series - Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 010: Receptacle, hermetic, round flange, jam nut mounting - Product standard

Luft- und Raumfahrt - Elektrische Rundsteckverbinder, kontaktgeschützt, dreigängige Gewinde-Schnellkupplung, Betriebstemperatur 175 °C oder 200 °C konstant - Teil 010: Hermetischer fester Steckverbinder mit Rundflansch und Mutternbefestigung - 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 010 : Embase à collerette ronde, hermétique à fixation par écrou - Norme de produit

Ta slovenski standard je istoveten z: **EN 3645-010:2006**

ICS:

49.060	Letalska in vesoljska elektriļ na oprema in sistemi	Aerospace electric equipment and systems

SIST EN 3645-010:2009 **en,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3645-010

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English Version

Aerospace series - Connectors, electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 010: Receptacle, hermetic, round flange, jam nut mounting - Product standard

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 010 : Embase à collerette ronde, hermétique à fixation par écrou - Norme de produit

Luft- und Raumfahrt - Elektrische Rundsteckverbinder, kontaktgeschützt, Drei-gangige Gewinde-Schnellkupplung, Dauerbetriebstemperaturen 175 °C oder 200 °C - Teil 010: Hermetischer Fester Steckverbinder mit runden Schweiß und Mutternbefestigung - Produktnorm

This European Standard was approved by CEN on 28 September 2006.

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.

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 Central Secretariat has the same status as the official versions.

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

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Contents

Page

Foreword

This document (EN 3645-010:2006) 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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

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

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

1 Scope

This standard specifies the characteristics of hermetic receptacles with jam nut mounting in the family of circular, electrical connectors, with triple start threaded coupling.

It applies to models in Table 3.

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

The contacts are unremovable and soldered termination.

These connectors are derived from and interchangeable with model Y in specification MIL-DTL-38999/23.

2 Normative references

The following referenced documents are indispensable for the application 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-38999/23, *Connectors, electrical, circular, threaded, receptacle, jam-nut mounting, hermetic, hermetic solder contacts, series III, metric.* [1)]

3 Terms and definitions

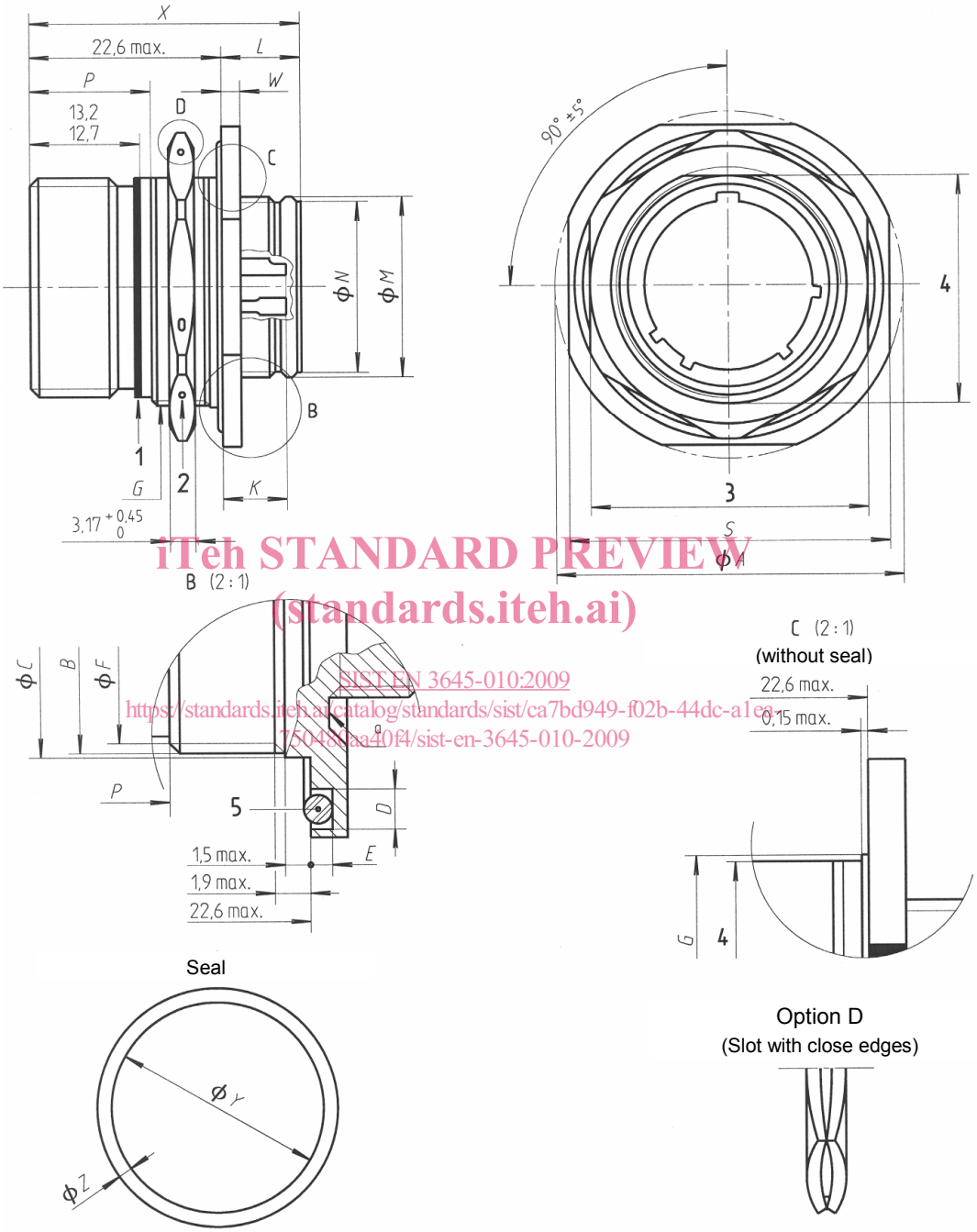
For the purposes of this document, the terms and definitions given in EN 3645-001 apply.

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
2 3 holes Ø 1,5 min. for brake wire (see option according to Detail D)
3 *H* on flats
4 *B* on flat
5 Seal

NOTE One disengagement is permissible to accept the accessory mounting.

Figure 1 — Hermetic jam nut receptacle

Table 1 — Hermetic jam nut receptacle - Dimensions

Shell size	*A* ± 0,3	*B* + 0,10 − 0,15	*C* [a] + 0,10 − 0,20	*D* + 0,13 − 0,03	*E* ± 0,13	*F* [b] max.	*G* Thread	*H*	*K* max. Male contact	*K* max. Female contact
09	30,2	16,53	17,40	2,39	1,14	15,9	M17×1 – 6g 0,1 R	24,00 21,82	5,3	5,9
11	34,9	19,07	20,60			18,8	M20×1 – 6g 0,1 R	27,00 24,99		
13	38,1	23,82	25,40			23,8	M25×1 – 6g 0,1 R	32,00 29,77	5,1	5,7
15	41,3	26,97	28,50			26,8	M28×1 – 6g 0,1 R	36,00 32,91		
17	44,5	30,15	31,85			30,8	M32×1 – 6g 0,1 R [c]	37,00 36,12		
19	49,2	33,32	34,90	3,58	1,91	33,8	M35×1 – 6g 0,1 R	41,00 39,25		
21	52,4	36,50	37,90			36,8	M38×1 – 6g 0,1 R	46,00 42,47		
23	55,6	39,67	41,20			39,8	M41×1 – 6g 0,1 R	50,00 45,61		
25	58,7	42,85	44,40			42,8	M44×1 – 6g 0,1 R	51,23 49,25		

L	*M* + 0,3 0	*N* ± 0,13	*P* + 0,4 − 0,1	*S* ± 0,4	*W* + 0,7 − 0,1	*X*	*Y*	*Z*	Mass g max. Stainless steel
9,10	16,3	15,30	14,1	27,0	2,2	29,2	20,50 20,19	1,85 1,70	34
9,10	19,4	16,40		31,8			25,27 24,97		41
9,10	22,7	21,60	14,3	34,9		29,3	28,45 28,14		50
9,10	25,9	24,80		38,1			31,62 31,32		62
9,10	29,0	28,00		41,3			34,80 34,49		83
9,70	32,2	31,20		46,0	3,0	30,1	37,92 37,62	2,69 2,54	108
9,70	35,4	34,30		49,2			41,20 40,69		141
9,70	38,6	37,50		52,4			44,37 43,86		172
9,70	41,7	40,70		55,6			47,55 47,04		203

a Dimensions *C* and 1,5 mm shall be compatible with the panel hole

b Diameter *F* corresponds to the start of the thread

c Upper diameter modified as follow: 31,95 max. 31,80 min.

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.

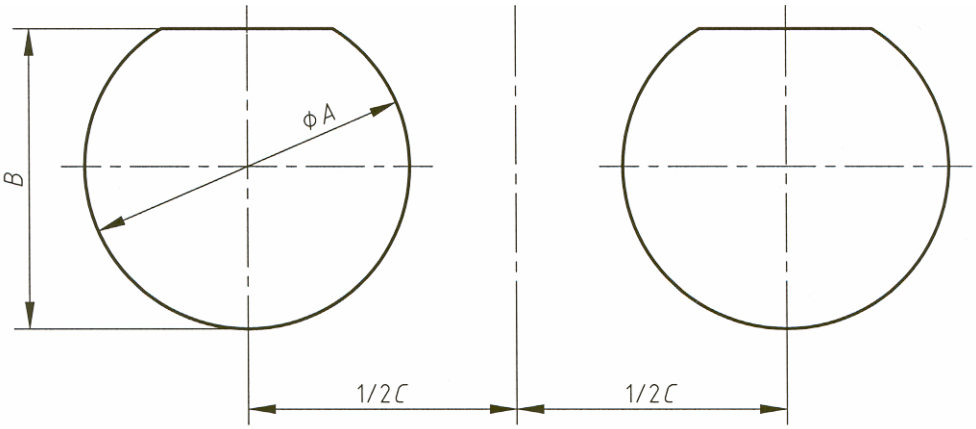


Figure 2 — Panel cut-out

Table 2 — Panel cut-out - Dimensions

Shell size	*A* $^{+0,25}_{0}$	*B* $^{0}_{-0,25}$	*C* min.
09	17,70	16,99	31,80
11	20,88	19,53	35,00
13	25,58	24,26	39,40
15	28,80	27,53	42,50
17	31,98	30,68	45,70
19	35,15	33,86	48,50
21	38,28	37,06	51,70
23	41,50	40,24	54,90
25	44,68	43,41	58,00

4.4 Electrical, mechanical and climatic characteristics

See EN 3645-002.