SLOVENSKI STANDARD
SIST EN 4652-413:2016

01-februar-2016

Aeronavtika - Konektorji, koaksialni, radiofrekvenčni - 413. del: Tip 4, vmesnik C - Izvedba z objemno matico - Skoznja vtičnica - Standard za proizvod

Aerospace series - Connectors, coaxial, radio frequency - Part 413: Type 4, C interface - Clamp nut assembly version - Bulkhead receptacle - Product standard

Luft- und Raumfahrt - Koaxiale Hochfrequenz-Steckverbinder - Teil 413: Typ 4, C-Schnittstelle, Klemmmontageversion, fester Steckverbinder für Trennwände - Produktnorm

Série aérospatiale . Connecteurs, coaxiaux, radiofréquence . Partie 413 : Interface de type 4C, version à assemblage par brides, embase passe-cloison . Norme de produit

Ta slovenski standard je istoveten z: **EN 4652-413:2015**

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 4652-413:2016 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4652-413

December 2015

ICS 49.060

English Version

Aerospace series - Connectors, coaxial, radio frequency - Part 413: Type 4, C interface - Clamp nut assembly version - Bulkhead receptacle - Product standard

Série aérospatiale - Connecteurs coaxiaux pour radio fréquences - Partie 413 : Type 4, interface C - Version à presse étoupe - Prolongateur femelle - Norme de produit

Luft- und Raumfahrt - Koaxiale Hochfrequenz-Steckverbinder - Teil 413: Typ 4, C-Schnittstelle, Klemmmontageversion, fester Steckverbinder für Trennwände - Produktnorm

This European Standard was approved by CEN on 13 May 2015.

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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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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN 4652-413:2015 E

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European foreword

This document (EN 4652-413:2015) 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 European 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 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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, 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the characteristics of bayonet coupling (C interface) coaxial straight bulkhead receptacles – 50 ohms. The cable to connector assembly is a clamp technology.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2591 [1)], *Aerospace series — Elements of electrical and optical connection — Test methods*

EN 2812, *Aerospace series — Stripping of electric cables*

EN 4652-001, *Aerospace series — Connectors, coaxial, radio frequency — Part 001: Technical specification*

EN 4652-410, *Aerospace series — Connectors, coaxial, radio frequency — Part 410: Type 4, C interface — Clamp nut assembly version — Straight plug — Product standard*

EN 9133, *Aerospace series — Quality management systems — Qualification procedure for aerospace standard parts*

TR 6058, *Aerospace series — Cable code identification list* [2)]

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 4652-001 apply.

4 Required characteristics

— The connection technology shall comply to required tests described in Clause 5.

— Interface shall comply to EN 4652-001.

— Water ingress resistance is required in unmated condition for cable group A.

1) All parts quoted in this standard.

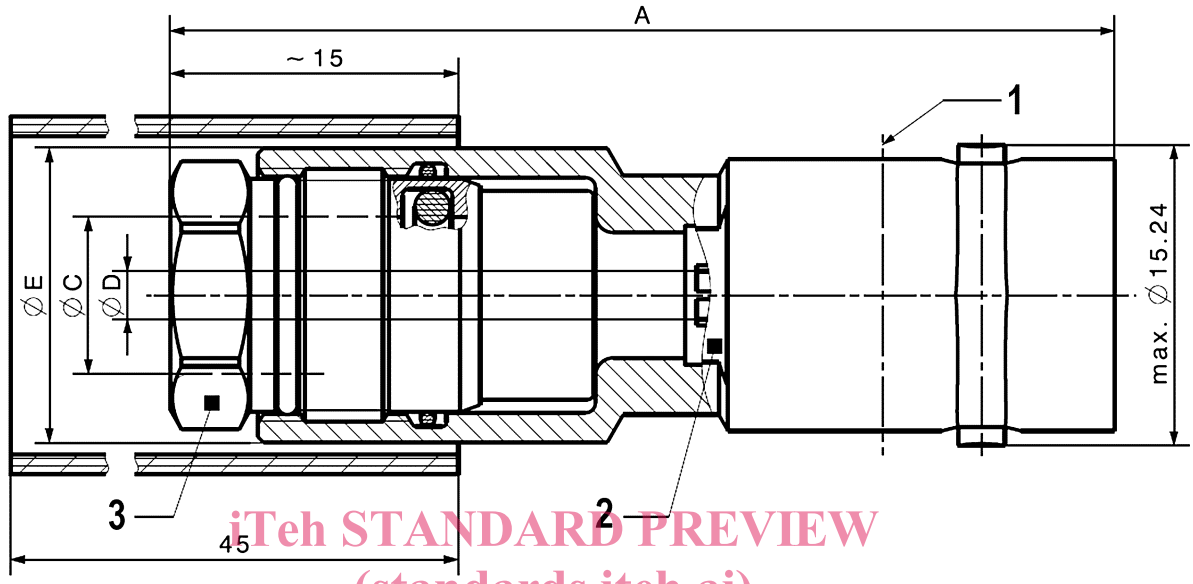
2) Published as ASD-STAN Technical Report at the date of publication of this standard. http://www.asd-stan.org/

4.1 Configuration, dimension and mass

Mass without heat shrink tubing.

See Figure 1 and Table 1.

Dimensions in millimetres



Key

1 Marking
2 Flat 10
3 HEX. *F*

Figure 1 — C bulkhead receptacle

Marking: see Clause 9.

Table 1 — C bulkhead receptacle dimensions and mass

Cable group	*A* max.	*ØC* (cable jacket) max.	*ØD* (cable conductor)	*ØE* max.	HEX. *F*	**Mass** g max.
A	48	7,8	2,3	15	12	40,0
B	42	5,55	1,4	13	8	29,0

4.2 Materials and finish

Centre contact ..... : Copper alloy gold plated over nickel undercoat

Insulators ..... : PTFE

Sealings ..... : Silicone rubber or silicone fluoride

Body ..... : Copper alloy, nickel plated

Heat shrink tube ..... : Polyolefin

Rear screw and other parts' materials shall have mechanical and electrical characteristics consistent with the requirements of this product standard.

4.3 Temperature

Operating temperature shall be between – 65 °C and 165 °C.

4.4 Electrical characteristics

Impedance ..... : 50 Ω

Maximum operating frequency ..... : 6 GHz

VSWR ..... : 1,15 up to 6 GHz

Insertion loss ..... : $0{,}05\sqrt{f}$ dB max., f in GHz

Contact resistance (initial centre contact) ..... : 1,0 mΩ max.

Insulation resistance ..... : 5 000 MΩ min.

Withstand voltage ..... : 1 500 Veff (at sea level)

4.5 General characteristics

Force to engage or disengage

— Longitudinal force ..... : 20 N

— Torque ..... : 0,45 Nm max.

Service life ..... : 500 cycles

Retention of centre contact ..... : 27 N

Retention of cable ..... : see Table 2.

Table 2 — Retention of cable

Cable group	Retention of cable N min.
A	180
B	180

4.6 Admissible cables, tools and stripping lengths

See Table 3 to Table 5.

Table 3 — Stripping lengths

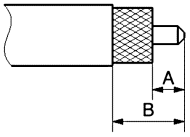
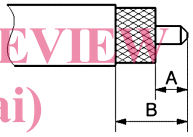
Cable group	Cable code (see TR 6058)	Stripping lengths mm
A	KW	
B	KX	

Table 4 — Stripping lengths cable group A

A		*B*	
min. mm	max. mm	min. mm	max. mm
3,6	4,4	8,6	9,4

Table 5 — Stripping lengths cable group B

A		*B*	
min. mm	max. mm	min. mm	max. mm
3,6	4,4	7,6	8,4

For stripping, see EN 2812.