SLOVENSKI STANDARD
SIST EN 3733-002:2008

01-julij-2008

Aeronavtika - Konektor, optiļ ni, okrogli, enokanalni, priključ en s samozaklepnim obroļ em, s stalno delovno temperaturo do 150 ÁC - 002. del: Seznam standardov za proizvod

Aerospace series - Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous - Part 002: List of product standards

Luft- und Raumfahrt - Optischer Rundsteckverbinder einpolig, Schraubkupplung, Betriebstemperatur 150 °C konstant - Teil 002: Übersicht über die Produktnormen

Série aérospatiale - Connecteur optique circulaire monovoie, à accouplement par bague filetée, température d'utilisation 150 °C continu - Partie 002 : Liste des normes de produit

Ta slovenski standard je istoveten z: **EN 3733-002:2008**

ICS:

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

SIST EN 3733-002:2008 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3733-002

April 2008

ICS 49.060

English Version

Aerospace series - Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous - Part 002: List of product standards

Série aérospatiale - Connecteur optique circulaire monovoie, à accouplement par bague filetée, température d'utilisation 150 °C continu - Partie 002 : Liste des normes de produit

Luft- und Raumfahrt - Optischer Rundsteckverbinder einpolig, Schraubkupplung, Betriebstemperatur 150 °C konstant - Teil 002: Übersicht über die Produktnormen

This European Standard was approved by CEN on 16 September 2007.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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 United Kingdom.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 3733-002:2008: E

Contents

Page

Tables

Foreword

This document (EN 3733-002:2008) 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 October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008

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, 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 lists the product standards for use with circular optical connectors covered by technical specification EN 3733-001. This standard also defines the conditions common to a single-way fibre optic connector with vibration proof self-locking coupling ring, for a variety of fibre and cable types, operating temperature up to 150 °C.

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 3733-001, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 001: Technical specification*[1)]

EN 3733-003, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 003: Plug connector for cable according to EN 4532, product standard*[1)]

EN 3733-004, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 004: Receptacle, connector, four hole fixing for cable according to EN 4532, product standard*[1)]

EN 3733-005, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 005: Receptacle, connector, two hole fixing for cable according to EN 4532, product standard*[1)]

EN 3733-006, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 006: Receptacle, connector, jam nut fixing for cable according to EN 4532, product standard*[1)]

EN 3733-007, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 007: Ferrule (optical contact) for cable according to EN 4532 (200 µm/280 µm fibre),* p*roduct standard*[1)]

EN 3733-008, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature up to 150 °C continuous — Part 008: Plug sub-assembly for cable to EN 4532 (200 µm/280 µm fibre) —* P*roduct standard*

EN 3733-009, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature up to 150 °C continuous — Part 009: Receptacle sub-assembly for cable to EN 4532 (200 µm/280 µm fibre) — Product standard*

EN 3733-101, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 101: Protective cover receptacle, product standard*[1)]

EN 3733-102, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 102: Protective cover plug, product standard*[2)]

---

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

2) In preparation at the date of publication of this standard.

EN 3733-103, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 103: Protective cover jam nut receptacle, product standard*[1)]

EN 3733-104, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 104: Receptacle, connector, dummy, four holes fixing, product standard*[1)]

EN 3733-105, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 105: Receptacle, connector, dummy, two hole fixing, product standard*[1)]

EN 3733-106, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 106: Receptacle, connector, dummy, jam nut, product standard*[1)]

EN 3733-107, Aerospace *series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 107: Terminator cover receptacle, product standard*[1)]

EN 3733-108, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 108: Cable support boot, product standard*[1)]

EN 3733-109, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 109: Epoxy, product standard*[2)]

EN 3733-203, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 203: Plug connector, product standard*[2)]

EN 3733-204, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 204: Receptacle, connector, four hole fixing, product standard*[2)]

EN 3733-205, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 205: Receptacle, connector, two hole fixing, product standard*[2)]

EN 3733-206, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 206: Receptacle, connector, jam nut fixing, product standard*[2)]

EN 3733-207, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 207: Ferrule (optical contact), product standard*[2)]

EN 3733-208, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 208: Plug sub-assembly, product standard*[2)]

EN 3733-209, *Aerospace series — Connector, optical, circular, single channel, coupled by self-locking ring, operating temperature 150 °C continuous — Part 209: Receptacle sub-assembly, product standard*[2)]

EN 4532, *Aerospace series — Cables, optical, single core — 200/280 µm fibre, 2,5 mm outer jacket — Technical specification*[1)]

EN 4533-001, *Aerospace series — Fibre optic systems — Handbook — Part 001: Termination methods and tools*[1)]

3 Product type and codification

See Table 1.

Table 1 — Product type and codification

Product type	Product standard EN 3733– (applicable cable/fibre)		
	EN 4532 (200 µm/280 µm)	EN part no. (to be allocated) (62,5 µm/125 µm)	EN part no. (to be allocated) (illustration only)
Plug connector	003	203	303
Receptacle, connector, four hole fixing	004	204	304
Receptacle, connector, two hole fixing	005	205	305
Receptacle, connector, jam nut fixing	006	206	306
Ferrule (optical contact)	007	207	307
Plug sub-assembly	008	208	308
Receptacle sub-assembly	009	209	309
Protective cover receptacle 2/4 hole	101	101	–
Protective cover plug	102	102	–
Protective cover jam nut	103	103	–
Receptacle, connector, dummy, four hole fixing	104	104	–
Receptacle, connector, dummy, two hole fixing	105	105	–
Receptacle, connector, dummy, jam nut	106	106	–
Terminator cover receptacle	107	107	–
Strain relief boot	108	108	–
Epoxy	109	109	–

4 Terminology

See EN 2591-100.

5 Operating conditions

5.1 Combinations of plugs, receptacles, subassemblies and ferrules

Appropriate combinations of product types for the same cable/fibre, i.e. EN 3733-003 to EN 3733-009 and EN 3733-203 to EN 3733-209, are compatible with the respective required performances. It is possible to interface plugs/receptacles of different fibre types, e.g. EN 3733-006 with EN 3733-203, although this is outside the scope of this standard.

5.2 Combinations of protective covers and connectors

See Table 2.

Table 2 — Combinations of protective covers and connectors

Product standard EN 3733–	Applicable connector EN 3733–							
	Plug connector		Receptacle, connector, four hole fixing		Receptacle, connector, two hole fixing		Receptacle, connector, jam nut fixing	
	003	203	004	204	005	205	006	206
101	–	–	X	X	X	X	–	–
102	X	X	–	–	–	–	–	–
103	–	–	–	–	–	–	X	X
104	X	X	–	–	–	–	–	–
105	X	X	–	–	–	–	–	–
106	X	X	–	–	–	–	–	–
107	–	–	X	X	X	X	X	X
108	X	X	X	X	X	X	X	X

5.3 Permissible cables

Product standards EN 3733-003 to EN 3733-009 will only meet the performance requirement of this standard when terminated with cable to EN 4532.

Product standards EN 3733-203 to EN 3733-209 will only meet the performance requirement of this standard when terminated with cable to the applicable product standard.

5.4 Operating characteristics

5.4.1 Climatic conditions

Operating temperatures:

— minimum temperature: – 65 °C;

— maximum temperature: 150 °C.

Corrosion and fluid resistance:

— salt mist: 500 h;

— fluid resistance: see EN 3733-001.

5.4.2 Mechanical conditions

Mechanical endurance: 500 mating and unmating operations