

**Aerospace series - Cable, electrical, fire resistant - Operating temperatures between - 65 °C and 260 °C - Part 004: DN family, single UV laser printable and multicore assembly - Light weight - Product standard**

Aerospace series - Cable, electrical, fire resistant -  
Operating temperatures between - 65 °C and 260 °C  
- Part 004: DN family, single UV laser printable and  
multicore assembly - Light weight - Product standard

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 2346-004:2006 sisaldab Euroopa standardi EN 2346-004:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 31.07.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 2346-004:2006 consists of the English text of the European standard EN 2346-004:2006.</p> <p>This document is endorsed on 31.07.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This standard specifies the characteristics of lightweight fire resistant, unscreened, electrical cables for use in the on-board electrical systems of aircraft at operating temperature between – 65 °C and 260 °C. Single core is UV laser printable in accordance with EN 3838; UV laser markability is not mandatory for multicore cables.</p>	<p><b>Scope:</b></p> <p>This standard specifies the characteristics of lightweight fire resistant, unscreened, electrical cables for use in the on-board electrical systems of aircraft at operating temperature between – 65 °C and 260 °C. Single core is UV laser printable in accordance with EN 3838; UV laser markability is not mandatory for multicore cables.</p>
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**ICS** 49.060

**Võtmesõnad:**

ICS 49.060

English Version

**Aerospace series - Cable, electrical, fire resistant - Operating temperatures between - 65 °C and 260 °C - Part 004: DN family, single UV laser printable and multicore assembly - Light weight - Product standard**

Série aérospatiale - Câbles électriques résistant au feu -  
Températures de fonctionnement comprises entre - 65 °C  
et 260 °C - Partie 004 : Famille DN, fil simple marquable au  
laser UV et éléments assemblés - Version allégée - Norme  
de produit

Luft- und Raumfahrt - Feuerbeständige elektrische  
Leitungen - Betriebstemperaturen zwischen - 65 °C und  
260 °C - Teil 004: DN-Familie, ein-und mehradrige  
Leitungen UV-laser bedruckbar - Gewichtsoptimiert -  
Produktnorm

This European Standard was approved by CEN on 3 February 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.

CEN members are the national standards bodies of 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 United Kingdom.



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

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## Foreword

This European Standard (EN 2346-004:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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 December 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

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 lightweight fire resistant, unscreened, electrical cables for use in the on-board electrical systems of aircraft at operating temperature between – 65 °C and 260 °C.

Single core is UV laser printable in accordance with EN 3838; UV laser markability is not mandatory for multicore cables.

## 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.

IEC 28:1925, *International standard of resistance for copper*.

EN 2234, *Aerospace series – Cable, electrical, fire resistant – Technical specification*.<sup>1)</sup>

EN 2346-002, *Aerospace series – Cable, electrical, fire resistant – Operating temperatures between – 65 °C and 260 °C – Part 002: General*.

EN 3475-100\*, *Aerospace series – Cables, electrical, aircraft use – Test methods – Part 100: General*.

EN 3838, *Aerospace series – Requirements and tests on user-applied markings on aircraft electrical cables*.<sup>1)</sup>

EN 4608-001, *Aerospace series – Cable, electrical, fire resistant – Single and twisted multicore assembly, screened (braided) and jacketed – Operating temperatures between – 65 °C and 260 °C – Part 001: Technical specification*.

EN 9133, *Aerospace series – Quality management systems – Qualification Procedure for aerospace standard parts*.

## 3 Terms and definitions

For the purposes of this standard, the terms and definitions given in EN 3475-100 apply.

## 4 Materials and construction

### 4.1 Materials

#### 4.1.1 Conductors

Individual strands used for the conductors shall be cylindrical and shall be:

- of nickel clad copper alloy for nominal cross sections of 0,4 mm<sup>2</sup> (code 004);
- of nickel clad copper for nominal cross sections  $\geq 0,6$  mm<sup>2</sup> (codes  $\geq 006$ ).

The copper shall meet the requirements of IEC 28 and the copper alloy the requirements of EN 2234.

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\* And all parts quoted in this standard.

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