



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 2591-100:2005**

ICS 49.060

**AEROSPACE SERIES - ELEMENTS OF  
ELECTRICAL AND OPTICAL CONNECTION -  
TEST METHODS - PART 100: GENERAL**

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**EN 2591-100**

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English Version

**Aerospace series - Elements of electrical and optical connection  
- Test methods - Part 100: General**

Série aérospatiale - Organes de connexion électrique et  
optique - Méthodes d'essais - Partie 100 : Généralités

Luft- und Raumfahrt - Elektrische und optische  
Verbindungselemente - Prüfverfahren - Teil 100:  
Allgemeines

This European Standard was approved by CEN on 19 September 2005.

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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 Central Secretariat has the same status as the official versions.

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## **Foreword**

This European Standard (EN 2591-100:2005) 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of an identical text or by endorsement, at the latest by April 2006, and conflicting national standards shall be withdrawn at the latest by April 2006.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, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## EN 2591-100:2005 (E)

### 1 Scope

This standard specifies the general requirements for the methods of testing elements of electrical, optical and data transmission system connections used in aerospace applications.

### 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 2083, *Aerospace series – Copper or copper alloy conductors for electrical cables – Product standard.*

EN 2084, *Aerospace series – Cables, electric, single-core, general purpose, with conductors in copper or copper alloy – Technical specification.*

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

EN 2346, *Aerospace series – Fire resistant electrical cables – Dimensions, conductor resistance and mass.*<sup>1)</sup>

EN 2591\*, *Aerospace series – Elements of electrical and optical connection – Test methods.*

EN 3745-201, *Aerospace series – Fibres and cables, optical, aircraft use – Test methods – Part 201: Visual examination.*

EN 60512-1, *Connectors for electronic equipment – Tests and measurements – Part 1: General (IEC 60512-1:2001)*

TR 4257, *Aerospace series – Elements of electrical and optical connection – Relationship between the numbering systems for parts of EN 2591.*<sup>2)</sup>

IEC 60050-581, *International Electrotechnical Vocabulary – Chapter 581: Electromechanical components for electronic equipment.*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

See IEC 60050-581 and EN 60512-1.

#### 3.1

##### **element of electrical or optical connection**<sup>3)</sup>

component such as connector, module, etc., the purpose of which is to ensure the connection of circuits

#### 3.2

##### **flight cover (or protective cover)**

accessory designed to ensure, in flight, mechanical protection and sealing of front face of a non coupled connector

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

2) Published as AECMA Technical Report at the date of publication of this standard.

3) In test standards the term "element of connection" shall be used.

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