

**Aerospace series - Elements of  
electrical and optical connection - Test  
methods - Part 613: Optical elements;  
Impact test**

Aerospace series - Elements of electrical and  
optical connection - Test methods - Part 613:  
Optical elements; Impact test

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 2591-613:2002 sisaldab Euroopa standardi EN 2591-613:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 06.08.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 2591-613:2002 consists of the English text of the European standard EN 2591-613:2002.</p> <p>This document is endorsed on 06.08.2002 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 a method of determining the impact resistance on a hard surface of optical connection elements (including permanent connections) and fibre optic couplers. It shall be used together with EN 2591 00</p>	<p><b>Scope:</b></p> <p>This standard specifies a method of determining the impact resistance on a hard surface of optical connection elements (including permanent connections) and fibre optic couplers. It shall be used together with EN 2591 00</p>
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**ICS** 49.060

**Võtmesõnad:** aerospace transport, air transport, aircraft, drop tests, electrical, electrical components, electrical equipment, electrical installations, fasteners, optical elements, optical waveguides, space transport, testing, testing conditions

ICS 49.060

English version

**Aerospace series - Elements of electrical and optical connection  
- Test methods - Part 613: Optical elements - Impact test**

Série aéronautique - Organes de connexion électrique et  
optique - Méthodes d'essais - Partie 613: Organes optiques  
- Résistance à l'impact

Luft- und Raumfahrt - Elektrische und optische  
Verbindungselemente - Prüfverfahren - Teil 613: Optische  
Elemente - Fallprüfung

This European Standard was approved by CEN on 8 February 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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## Foreword

This document (EN 2591-613:2002) has been prepared by the European Association of Aerospace Manufacturers (AECMA).

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 2002, and conflicting national standards shall be withdrawn at the latest by December 2002.

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

## 1 Scope

This standard specifies a method of determining the impact resistance on a hard surface of optical connection elements (including permanent connections) and fibre optic couplers.

It shall be used together with EN 2591-100.

## 2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 2591-100	Aerospace series – Elements of electrical and optical connection – Test methods – Part 100: General <sup>1)</sup>
EN 2591-408	Aerospace series – Elements of electrical and optical connection – Test methods – Part 408: Mating and unmating forces <sup>2)</sup>
EN 2591-601	Aerospace series – Elements of electrical and optical connection – Test methods – Part 601: Optical elements – Insertion loss <sup>2)</sup>
EN 2591-6101	Aerospace series – Elements of electrical and optical connection – Test methods – Part 6101: Optical elements – Visual examination
TR 4257	Aerospace series – Elements of electrical and optical connection – Relationship between the numbering systems for parts of EN 2591 <sup>3)</sup>

## 3 Preparation of specimens

**3.1** Specimens shall be fitted with normal accessories and terminated in accordance with the product standard. Cavities with unterminated contacts shall have filler plugs fitted (where applicable).

If not at standard test conditions, the specimens shall be subjected to standard test conditions and stabilized at these conditions for 24 h as defined in EN 2591-100.

**3.2** Unless otherwise specified in the technical specification, the following details shall be stated:

- mounting fixture if other than stated in figure 1;
- type of cable to be used;
- length of pipe and cable, if other than stated in figure 2;
- drop height, if other than stated in table 1;
- number of individual tests (drops) if other than stated in table 1;
- sequence of individual drop tests, if other than stated in table 1;
- severity level, see table 1;
- impact surface (length, width, thickness, material) if other than stated in 4;
- any other deviations from standard test method;
- maximum value of insertion loss.

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

2) See TR 4257.

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