
Aerospace series - Elements of electrical and optical connection - Test methods - Part 6403: Optical elements - Vibrations

Aerospace series - Elements of electrical and optical connection - Test methods - Part 6403: Optical elements - Vibrations

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 6403: Optische Verbindungselemente - Schwingungen

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 6403 : Organes optiques - Vibrations

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Ta slovenski standard je istoveten z: EN 2591-6403:2001

ICS:

49.060

Letalska in vesoljska
električna oprema in sistemiAerospace electric
equipment and systems**SIST EN 2591-6403:2004****en**

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EUROPEAN STANDARD

EN 2591-6403

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English version

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Série aérospatiale - Organes de connexion électrique et
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optiques - Vibrations

Luft- und Raumfahrt - Elektrische und optische
Verbindungselemente - Prüfverfahren - Teil 6403: Optische
Elemente - Schwingungen

This European Standard was approved by CEN on 5 August 2001.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

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

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 June 2002, and conflicting national standards shall be withdrawn at the latest by June 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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies a method of determining the ability of optical connection elements (including permanent connections) and fibre optic couplers to withstand specified severities of sinusoidal, random or simulated gunfire vibrations.

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 ¹⁾
EN 2591-402	Aerospace series – Elements of electrical and optical connection – Test methods – Part 402: Shock
EN 2591-403	Aerospace series – Elements of electrical and optical connection – Test methods – Part 403: Sinusoidal and random vibration
EN 2591-408	Aerospace series – Elements of electrical and optical connection – Test methods – Part 408: Mating and unmating forces
EN 2591-601	Aerospace series – Elements of electrical and optical connection – Test methods – Part 601: Optical elements – Insertion loss
EN 2591-602	Aerospace series – Elements of electrical and optical connection – Test methods – Part 602: Optical elements – Variation of attenuation and optical discontinuity
EN 2591-6101	Aerospace series – Elements of electrical and optical connection – Test methods – Part 6101: Optical elements – Visual examination

3 Preparation of specimens

3.1 Specimens shall be fitted with normal accessories, mounted and terminated in accordance with the product standard.

Specimens shall be mated or unmated, prior to test, as defined in the product standard.

Optical connection elements shall be mated or unmated with protective covers fitted as defined in the product standard.

3.2 Unless indicated in the technical specification, the following details shall be specified:

See EN 2591-403 (if applicable) plus:

- maximum value of insertion loss;
- maximum permissible variation of attenuation;
- type and length of cable/fibre.

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

EN 2591-6403:2001 (E)

4 Apparatus

See EN 2591-403 and EN 2591-602.

5 Method

5.1 Initial measurements (if applicable)

EN 2591-402

5.2 Levels

EN 2591-403

5.2.1 Sinusoidal vibrations (method A)

5.2.2 Random vibrations (method B)

5.2.3 Simulated gunfire (method C)

5.3 Procedure (method A, B or C)

Unless otherwise specified in the product standard, monitoring of optical discontinuity (EN 2591-602) shall be carried out on all optical connections.

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5.4 Final measurements and requirements

EN 2591-6101

EN 2591-408

EN 2591-601