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**Aerospace series - Elements of electrical and optical connection - Test methods - Part 6323: Optical elements - Thermal shock (Hermetically sealed devices)**

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Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 6323: Optische Elemente - Thermischer Schock (für hermetische Steckverbinder)

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 6323: Organes optiques - Chocs thermiques (Organes de connexion hermétiques)

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**Ta slovenski standard je istoveten z: EN 2591-6323:2002**

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**ICS:**

49.060 Štejni in optični elementi za zvezanje električnih in optičnih naprav v letalski opremi in sistemih  
Aerospace electric equipment and systems

**SIST EN 2591-6323:2004****en**

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EUROPEAN STANDARD

**EN 2591-6323**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2002

ICS 49.060

English version

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- Test methods - Part 6323: Optical elements - Thermal shock  
(Hermetically sealed devices)**

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Verbindungselemente - Prüfverfahren - Teil 6323: Optische  
Elemente - Thermischer Schock (für hermetische  
Steckverbinder)

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

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

## Foreword

This document (EN 2591-6323:2002) 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 verifying the ability of optical connection elements, with a hermetic sealing element to sustain thermal shock.

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 2591-323	Aerospace series – Elements of electrical and optical connection – Test methods – Part 323: Thermal shock
EN 2591-601	Aerospace series – Elements of electrical and optical connection – Test methods – Part 601: Insertion loss
EN 2591-6101	Aerospace series – Elements of electrical and optical connection – Test methods – Part 6101: Visual examination

## 3 Preparation of specimens

**3.1** Specimens shall be fitted with the accessories and terminated as specified.

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

See EN 2591-323 (if applicable) plus:

- type and length of cable/fibre;
- maximum value of insertion loss;
- number of specimens.

## 4 Apparatus

As in EN 2591-323.

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

EN 2591-6323:2002 (E)

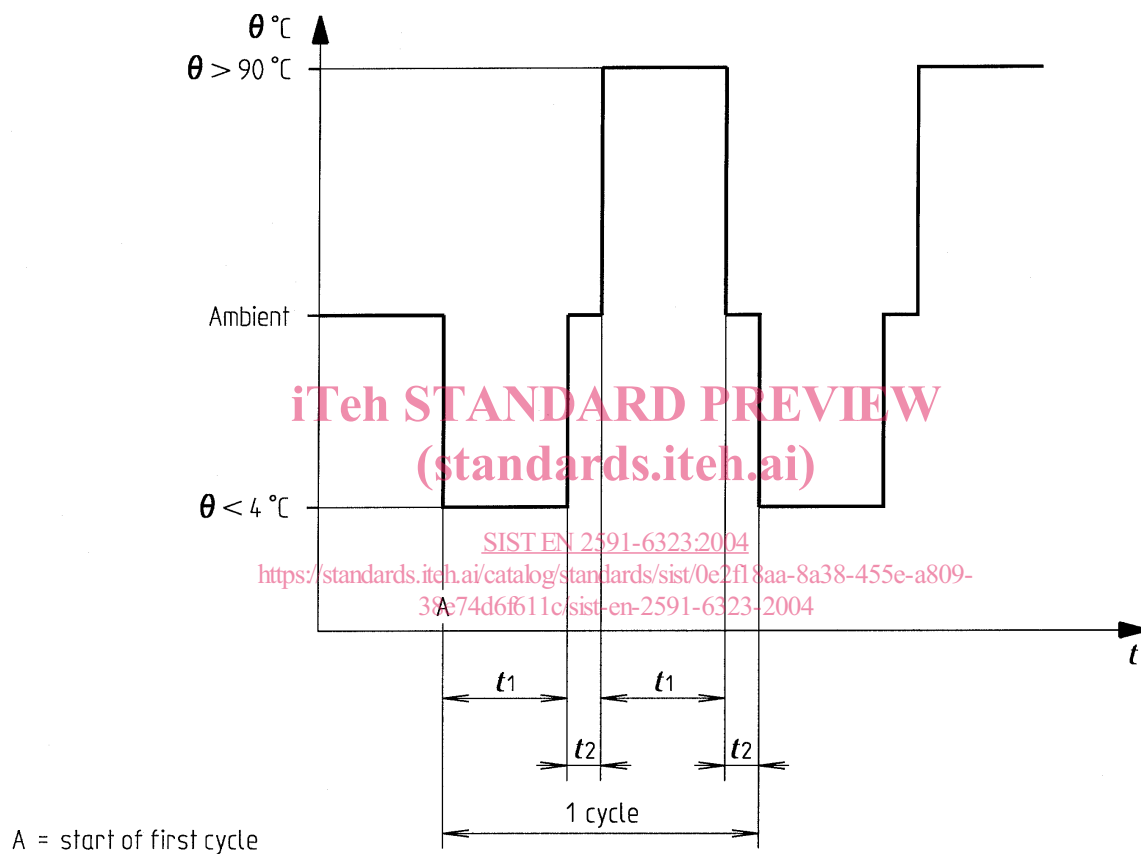
## 5 Method

### 5.1 Initial measurements

They shall be carried out as specified, plus EN 2591-601.

### 5.2 Procedure

The specimen, at initial temperature, shall be immersed in the centre of the containers in accordance with the cycle defined in figure 1.



**Figure 1**

The time of immersion in the water at each of the two temperatures shall be  $t_1 = (10 \pm 1)$  s and  $t_2$  in accordance with EN 2591-323 (< 5 s).

The number of cycles shall be 10.

### 5.3 Recovery

See EN 2591-323.

### 5.4 Final measurements (if applicable)

The specimen shall be subjected to the following test sequence:

- EN 2591-323
- EN 2591-601
- EN 2591-6101