# SLOVENSKI STANDARD
# SIST EN 2591-6415:2004

**01-maj-2004**

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**Aerospace series - Elements of electrical and optical connection - Test methods - Part 6415: Optical elements - Test probe damage**

Aerospace series - Elements of electrical and optical connection - Test methods - Part 6415: Optical elements - Test probe damage

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 6415: Optische Elemente - Beschädigung durch Prüfdorn



Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 6415 : Organes optiques - Endommagement par sonde d'essai



**Ta slovenski standard je istoveten z:** **EN 2591-6415:2001**

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**ICS:**

| | | |
|---|---|---|
| 49.060 | Letalska in vesoljska elektriļ na oprema in sistemi | Aerospace electric equipment and systems |

**SIST EN 2591-6415:2004** **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 2591-6415

December 2001

ICS 49.060

English version

# Aerospace series - Elements of electrical and optical connection - Test methods - Part 6415: Optical elements - Test probe damage

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 6415: Organes optiques - Endommagement par sonde d'essai

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 6415: Optische Elemente - Beschädigung durch Prüfdorn

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.



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 checking that the alignment system used for optical connection elements is not damaged by the insertion of a specified probe.

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.

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|---|---|
| EN 2591-100 | Aerospace series – Elements of electrical and optical connection – Test methods – Part 100: General [1)] |
| EN 2591-408 | Aerospace series – Elements of electrical and optical connection – Test methods – Part 408: Mating and unmating forces |
| EN 2591-415 | Aerospace series – Elements of electrical and optical connection – Test methods – Part 415: Test probe damage (female contact) |
| EN 2591-601 | Aerospace series – Elements of electrical and optical connection – Test methods – Part 601: Optical elements – Insertion loss |
| 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, half of which contain the alignment system, shall be tested with terminated contacts and standard accessories fitted.

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

See EN 2591-415 (if applicable) plus:

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

## 4 Apparatus

See EN 2591-415 and EN 2591-601.

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

# 5 Method

## 5.1 Initial measurements (if applicable)

EN 2591-601

EN 2591-408

## 5.2 Number of contacts to be measured per size

EN 2591-415

## 5.3 Procedure

The test probe shall be fully inserted into the alignment system which is held horizontally during the test.

A constant bending moment as defined in the product standard, shall be applied to the probe. This shall be repeated with the probe withdrawn to a depth of 2/3 of "A" (see EN 2591-415). The probe shall then be removed.

This test shall be repeated three times with the optical connection element rotated through 90° between each test.

## 5.4 Final measurements and requirements (if applicable)

EN 2591-6101 – Visual examination, paying particular attention to chipping or distortion of the alignment system

EN 2591-601

EN 2591-408