SLOVENSKI STANDARD
SIST EN 2591-414:2001

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Aerospace series - Elements of electrical and optical connection - Test methods - Part 414: Unmating of lanyard release connectors

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Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 414: Trennung von Steckverbindern mit Kabelzugentriegelung

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 414: Désaccouplement des connecteurs largables

Ta slovenski standard je istoveten z: **EN 2591-414:1998**

ICS:

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

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This European Standard was approved by CEN on 29 January 1998.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

Central Secretariat: 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of an identical text or by endorsement, at the latest by February 1999, and conflicting national standards shall be withdrawn at the latest by February 1999.

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 assessing the unmating ability of lanyard release connectors.

It shall be used together with EN 2591.

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	Aerospace series - Elements of electrical and optical connection - Test methods - General
EN 2591-101	Aerospace series - Elements of electrical and optical connection - Test methods - Part 101: Visual examination [1)]
EN 2591-201	Aerospace series - Elements of electrical and optical connection - Test methods - Part 201: Contact resistance - Low level
EN 2591-202	Aerospace series - Elements of electrical and optical connection - Test methods - Part 202: Contact resistance at rated current
EN 2591-207	Aerospace series - Elements of electrical and optical connection - Test methods - Part 207: Voltage proof test
EN 2591-310	Aerospace series - Elements of electrical and optical connection - Test methods - Part 310: Cold [1)]
EN 2591-313	Aerospace series - Elements of electrical and optical connection - Test methods - Part 313: Artificial rain [1)]
EN 2591-408	Aerospace series - Elements of electrical and optical connection - Test methods - Part 408: Mating and unmating forces [1)]

3 Preparation of specimens

3.1 Specimens shall be prepared according to the technical specification.

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

- method of mounting, type of cable and definition of specimen wiring;
- initial measurements (if applicable);
- mating and unmating forces;
- contact resistance;
- value of the pull-out force;
- angle of application of the pull-out force;
- number of tests per direction;
- value of the test voltage;
- final measurements (if applicable).

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

4 Apparatus

The test equipment shall provide a pulling speed of (5,5 ± 0,5) m/s after a travel of 30 mm.

5 Method

5.1 Initial measurements (if applicable)

Specimens shall be subjected to the following test sequence:

- EN 2591-408, mating force;
- EN 2591-201 or EN 2591-202;
- EN 2591-207.

5.2 Procedure

The specimens shall be tested to EN 2591-313 (without initial nor final measurements) and then immediately to EN 2591-310 at a temperature of (– 55 ± 2) °C for 1 h.

Then, within 2 min, the specimens shall be mounted on the test equipment and disengaged by applying a force in the four directions to the lanyard as shown in figure 1. The angle of application of the pull-out force (α) shall be as specified.

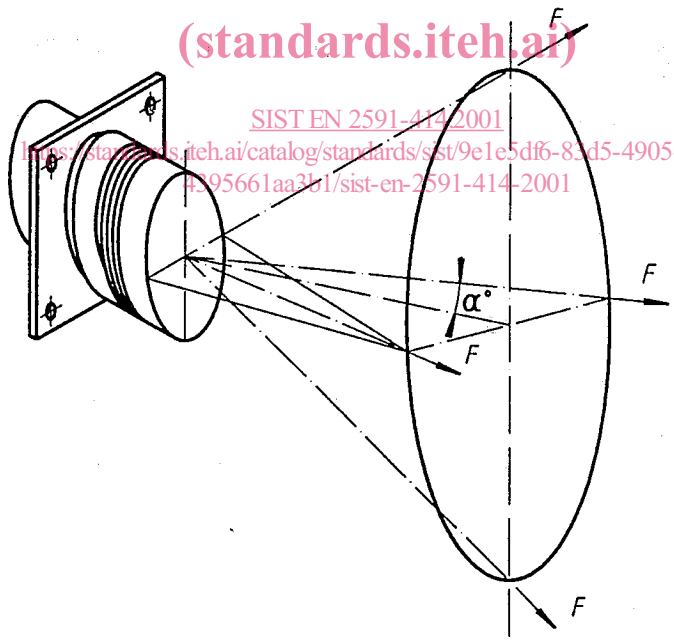

Figure 1

The unmating force shall be applied after the lanyard has first been made taut without stress.

5.3 Final measurements (if applicable)

The specimens shall be subjected to the following test sequence:

- EN 2591-101;
- EN 2591-408, for the mating force;
- EN 2591-201 or EN 2591-202;
- EN 2591-207, method A.