SLOVENSKI STANDARD
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Aerospace series - Elements of electrical and optical connection - Test methods - Part 406: Mechanical endurance

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Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 406: Mechanische Lebensdauer

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 406: Endurance mécanique

Ta slovenski standard je istoveten z: **EN 2591-406:1998**

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 23 February 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.

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

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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of an identical text or by endorsement, at the latest by February 1999, and conflicting national standards shall be withdrawn at the latest by February 1999.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 mechanical endurance of elements of connection without electrical load.

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
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 2591-205	Aerospace series - Elements of electrical and optical connection - Test methods - Part 205: Housing (shell) electrical continuity
EN 2591-206	Aerospace series - Elements of electrical and optical connection - Test methods - Part 206: Measurement of insulation resistance
EN 2591-207	Aerospace series - Elements of electrical and optical connection - Test methods - Part 207: Voltage proof test
EN 2591-312	Aerospace series - Elements of electrical and optical connection - Test methods - Part 312: Air leakage [1)]
EN 2591-313	Aerospace series - Elements of electrical and optical connection - Test methods - Part 313: Artificial rain [1)]
EN 2591-314	Aerospace series - Elements of electrical and optical connection - Test methods - Part 314: Immersion at low air pressure [1)]
EN 2591-408	Aerospace series - Elements of electrical and optical connection - Test methods - Part 408: Mating and unmating forces [1)]

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

3 Preparation of specimens

3.1 Specimens shall be prepared according to the technical specification.

The bundle of cables shall be maintained by the accessory as specified.

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

- mounting method, type of cable and definition of specimen wiring;
- manual test;
- mechanical test and its rate;
- number of mating and unmating operations;
- final measurements (if applicable).

4 Method

4.1 Procedure

The specimens shall be submitted without electrical load, to the specified number of mating and unmating operations at the specified rate.

The specimens shall be mated, locked and unmated so that plug and receptacle are completely separated, which constitutes one cycle.

Mating and unmating may be carried out manually or unless otherwise specified with a mechanical device simulating manual operations provided the latter does not induce any excessive stresses.

A counter shall record the number of mating and unmating operations.

4.2 Final measurements (if applicable)

The specimens shall be subjected to the following test sequence:

- EN 2591-101;
- EN 2591-201 or EN 2591-202;
- EN 2591-205;
- EN 2591-206;
- EN 2591-207;
- EN 2591-408;
- EN 2591-312 or EN 2591-313 or EN 2591-314.