# Aerospace series - Elements of electrical and optical connection - Test methods - Part 420: Mechanical strength of rear accessories

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#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

standardisation organisation.

Käesolev Eesti standard EVS-EN 2591- 420:2002 sisaldab Euroopa standardi EN 2591-420:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 2591-420:2002 consists of the English text of the European standard EN 2591-420:2001.
Käesolev dokument on jõustatud 16.01.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 16.01.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti	The standard is available from Estonian

#### Käsitlusala:

standardiorganisatsioonist.

This standard specifies a method of determining the mechanical strength of rear accessories used on elements of connection subjected to bending, tensile and torsional forces.

#### Scope:

This standard specifies a method of determining the mechanical strength of rear accessories used on elements of connection subjected to bending, tensile and torsional forces.

ICS 49.060

**Võtmesõnad:** air, bending stress, connecting threads, connectored joints, contact, contact connection, electrical installations, fasteners, functional reliability, resistance, space transport, strength of materials, strength tests, tensile strain, testing, torsional stresses

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 2591-420

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ICS 49,060

#### English version

## Aerospace series - Elements of electrical and optical connection - Test methods - Part 420: Mechanical strength of rear accessories

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 420: Tenue mécanique des accessoires arrière

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 420: Mechanische Festigkeit der rückseitigen Zubehörteile

This European Standard was approved by CEN on 4 June 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 May 2002, and conflicting national standards shall be withdrawn at the latest by May 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 mechanical strength of rear accessories used on elements of electrical and optical connection subjected to bending, tensile and torsional forces.

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 2591-101 Aerospace series – Elements of electrical and optical connection – Test methods –

Part 101: Visual examination

#### 3 Preparation of specimens

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

- mounting and locking of specimens;
- for phase A, bending moment;
- for phase B, tensile force;
- for phase C, torsional moment;
- for phase D, tightening torque;
- requirements.

#### 4 Apparatus

- Equipment for applying and measuring the bending, tensile, torsional forces and torques
- Fixture simulating the rear part of a connector

#### 5 Method

#### 5.1 Procedure

The mounted specimens shall be subjected to the following test sequence:

<sup>1)</sup> Published as AECMA Prestandard at the date of publication of this standard