

Aerospace series - Elements of electrical and optical connection - Test methods - Part 403: Sinusoidal and random vibration

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 2591-403:2025 sisaldab Euroopa standardi EN 2591-403:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 07.05.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 2591-403:2025 consists of the English text of the European standard EN 2591-403:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 07.05.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 49.060

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EUROPEAN STANDARD

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Aerospace series - Elements of electrical and optical connection - Test methods - Part 403: Sinusoidal and random vibration

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 403 : Vibrations sinusoïdales et aléatoires

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 403: Sinus- und rauschförmige Schwingungen

This European Standard was approved by CEN on 2 September 2024.

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

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European foreword

This document (EN 2591-403:2025) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, 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of an identical text or by endorsement, at the latest by November 2025, and conflicting national standards shall be withdrawn at the latest by November 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 2591-403:2018.

This document includes the following significant technical changes with respect to EN 2591-403:2018:

- normative references updated;
- scope: dated reference in Clause 5.4.1 and Clause 6.4 updated.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies a method of determining the ability of elements of connection to withstand sinusoidal or random vibrations of specified severities.

It is used together with EN 2591-100.

This test is based on EN 60068-2-6 and EN 60068-2-64.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 2591-204, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 204: Discontinuity of contacts in the microsecond range*

EN 2591-408, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 408: Mating and unmating forces*

EN 60068-2-6:2008, *Environmental testing — Part 2-6: Tests — Test Fc: Vibration (sinusoidal) (IEC 60068-2-6:2007)*

EN 60068-2-64:2008,¹ *Environmental testing — Part 2-64: Tests — Test Fh: Vibration, broadband random and guidance (IEC 60068-2-64:2008)*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

¹ As impacted by EN 60068-2-64:2008/A1:2019.