



SLOVENSKI STANDARD
SIST EN 2591-412:2001
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Aerospace series - Elements of electrical and optical connection - Test methods - Part 412: Contact insertion and extraction forces

Aerospace series - Elements of electrical and optical connection - Test methods - Part 412: Contact insertion and extraction forces

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 412: Steck- und Ziehkräfte der Kontakte

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 412: Forces d'insertion et d'extraction des contacts

<https://standards.iteh.ai/catalog/standards/sist/e0af6fd-1b16-4e3d-ac24-bfa0014149c3/sist-en-2591-412-2001>

Ta slovenski standard je istoveten z: EN 2591-412:1999

ICS:

49.060 Številni sistemi za letalstvo in zrakoplovstvo
Aerospace electric equipment and systems

SIST EN 2591-412:2001 en

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EUROPEAN STANDARD

EN 2591-412

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 1999

ICS 49.060

English version

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- Test methods - Part 412: Contact insertion and extraction
forces**

Série aérospatiale - Organes de connexion électrique et
optique - Méthodes d'essais - Partie 412: Forces d'insertion
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Verbindungselemente - Prüfverfahren - Teil 412: Steck- und
Ziehkräfte der Kontakte

This European Standard was approved by CEN on 23 February 1999.

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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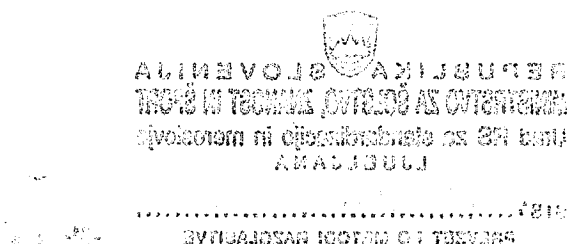
Foreword

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 September 1999, and conflicting national standards shall be withdrawn at the latest by September 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 insertion/extraction forces for contacts used in elements of connection.

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

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:

- insertion/extraction tool;
- type of cable; [SIST EN 2591-412:2001](https://standards.iteh.ai/catalog/standards/sist/e0af6fd-1b16-4e3d-ac24-bfa0014149c3/sist-en-2591-412-2001)
- insertion/extraction forces; <https://standards.iteh.ai/catalog/standards/sist/e0af6fd-1b16-4e3d-ac24-bfa0014149c3/sist-en-2591-412-2001>
- requirements.

4 Apparatus

- Insertion/extraction tool
- Device for holding specimens
- Force measuring device

5 Method

5.1 Number of contacts to be measured per size

See table 1.

Table 1

| Number of contacts | Number to be tested % |
|--------------------|-------------------------------------|
| 1 to 5 | 100 |
| 6 to 60 | 50 (with a minimum of 6 specimens) |
| 61 to 130 | 25 (with a minimum of 31 specimens) |
| ≥ 131 | 10 (with a minimum of 34 specimens) |

At least one contact shall be at/near the centre of the specimens, and one near the periphery, the others being distributed throughout the specimens.

The selected contacts and cavities shall not have been previously used.

5.2 Procedure

If the number of contacts of the same size is equal to or less than five each contact shall be submitted to ten operations.

If the number of contacts of the same size is greater than five each contact shall be submitted to three operations.

Forces shall be measured during the first and the last operation.

5.2.1 Insertion force

The contact shall be inserted with the specified tool. Ensure that the contact is correctly engaged.

The force required to insert the contact shall be measured.

5.2.2 Extraction force

The contact shall be extracted with the specified tool.

The force required to extract the contact shall be measured.

5.3 Requirements

The insertion/extraction forces shall not exceed the specified values.