



**SLOVENSKI STANDARD
SIST EN 2591-513:2004**

01-maj-2004

Aerospace series - Elements of electrical and optical connection - Test methods - Part 513: Magnetic permeability

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Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 513: Magnetische Durchlässigkeit

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 513: Perméabilité magnétique

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Ta slovenski standard je istoveten z: EN 2591-513:2002

ICS:

49.060 Štejni in optični elementi za povezavo električnih in optičnih sistemov v letalski in vesoljski opremi in sistemih
Aerospace electric equipment and systems

SIST EN 2591-513:2004

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 2591-513

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ICS 49.060

English version

**Aerospace series - Elements of electrical and optical connection
- Test methods - Part 513: Magnetic permeability**

Série aérospatiale - Organes de connexion électrique et
optique - Méthodes d'essais - Partie 513: Perméabilité
magnétique

Luft- und Raumfahrt - Elektrische und optische
Verbindungselemente - Prüfverfahren - Teil 513:
Magnetische Durchlässigkeit

This European Standard was approved by CEN on 8 February 2002.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

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Foreword

This document (EN 2591-513:2002) has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After enquiries 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 December 2002, and conflicting national standards shall be withdrawn at the latest by December 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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom

1 Scope

This standard specifies a method of verifying that the relative magnetic permeability of a test item is below a specified value.

The method is suitable for low permeability values : i.e. relative magnetic permeability of 2,5 or less.

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⁾

3 Preparation of specimens

The specimens shall be fully assembled connectors mated pair, fully equipped with wired contacts. If the specimens are not connectors, the preparation shall be specified in the product standard.

4 Details to be specified

Maximum relative permeability level

Test sample

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5 Test method

5.1 Test equipment

This is a low- μ permeability indicator which works according to the following principle : the centre of a permanent magnet is attached to the end of a movable arm having a fulcrum in the centre and a counterbalance at the opposite end, thus permitting the permanent magnet to move in one plane in both directions.

The standard inserts are low magnetic materials of known permeability values as calibrated by the manufacturer of the indicator.

5.2 Test

Screw into the top of the case a calibrated insert of the specified permeability. The permanent magnet is attracted to the insert by a force dependent upon the insert's designated permeability value. Place the end of the permanent magnet projecting from the hole in the bottom of the indicator in contact with the item being tested. Move the indicator away in a direction normal to the contact surface. If the item being tested has a permeability higher than that of the insert, the permanent magnet will break contact first with the insert as the indicator is moved away. However, if the permeability of the item being tested is lower than that of the insert, the permanent magnet will break contact first with the test item as the indicator is moved away.

5.3 Requirement

Maximum relative permeability shall be specified in the product standard.

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