# Aerospace series - Cables, electrical, aircraft use - Test methods - Part 501: Dynamic cut-through

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### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 3475- 501:2006 sisaldab Euroopa standardi EN 3475-501:2006 ingliskeelset teksti.	This Estonian standard EVS-EN 3475- 501:2006 consists of the English text of the European standard EN 3475- 501:2006.
Käesolev dokument on jõustatud 31.07.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 31.07.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.
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Käsitlusala:	Scope:
This standard specifies a method of	This standard specifies a method of
measuring the resistance to cut-through of	measuring the resistance to cut-through of
an insulated conductor or jacket. This test	an insulated conductor or jacket. This test
is limited to cables smaller than code 140	is limited to cables smaller than code 140
(gauge size 6) and insulations with a	(gauge size 6) and insulations with a
thickness of 0,38 mm or less. It shall be	thickness of 0,38 mm or less. It shall be
	used together with EN 3475-100.
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#### ICS 49.060

Võtmesõnad: aerospace transport, air transport, aircraft, cables, electric cables, electric conductors, electrical, electrical cords, notch strength, notches, specification (approval), specifications, strength of materials, testing

## **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 3475-501

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ICS 49.060

Supersedes EN 3475-501:2002

**English Version** 

### Aerospace series - Cables, electrical, aircraft use - Test methods - Part 501: Dynamic cut-through

Série aérospatiale - Câbles électriques à usage aéronautique - Méthodes d'essai - Partie 501 : Résistance à la coupure

Luft- und Raumfahrt - Elektrische Leitungen für Luftfahrtverwendung - Prüfverfahren - Teil 501: Kerbfestigkeit

This European Standard was approved by CEN on 20 April 2006.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, 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 (EN 3475-501:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-STAN).

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 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

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

This document supersedes EN 3475-501:2002.

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

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### 1 Scope

This standard specifies a method of measuring the resistance to cut-through of an insulated conductor or jacket. This test is limited to cables smaller than code 140 (gauge size 6) and insulations with a thickness of 0,38 mm or less.

It shall be used together with EN 3475-100.

### 2 Normative references

The following referenced documents are indispensable for the application 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 3475-100, Aerospace series — Cables, electrical, aircraft use — Test methods — Part 100: General.

### 3 Preparation of specimens

The test specimen shall be a single 450 mm length of insulated cable. Remove sufficient insulation from one end of the specimen for connection to the detection circuit.

#### 4 Apparatus

A tensile tester (or equivalent apparatus) shall operate in a compression mode and be equipped with a means to record the force necessary to drive the cutting edge through the insulation of a finished cable specimen. The cutting edge shall be positioned across the specimen at 90° to its longitudinal axis and shall have the dimensions shown in Figure 1.

The tester shall also be equipped with a chamber that allows the test to be performed after stabilisation at elevated temperatures, and a low voltage detection circuit shall stop the tester when the edge cuts through the insulation and contacts the conductor.