

SVENSK STANDARD

SS-EN 3745-517:2017



Fastställt/Approved: 2017-03-28
Publicerad/Published: 2017-04-06
Utgåva/Edition: 2
Språk/Language: engelska/English
ICS: 49.060; 49.090

Flyg- och rymdteknik – Optofibrer och optokablar för flygplan – Provningsmetoder – Del 517: Provning genom fastspänning med buntband

Aerospace series – Fibres and cables, optical, aircraft use – Test methods – Part 517: Cable tie clamping test



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The European Standard EN 3745-517:2017 has the status of a Swedish Standard. This document contains the official version of EN 3745-517:2017.

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Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

EN 3745-517

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

ICS 49.090

Supersedes EN 3745-517:2012

English Version

Aerospace series - Fibres and cables, optical, aircraft use - Test methods - Part 517: Cable tie clamping test

Série aérospatiale - Fibres et câbles optiques à usage
aéronautique - Méthodes d'essais - Partie 517: Essai de
serrage par colliers de frettage

Luft- und Raumfahrt - Faseroptische Leitungen für
Luftfahrzeuge - Prüfverfahren - Teil 517:
Klemmprüfung mit Kabelbindern

This European Standard was approved by CEN on 29 July 2016.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 3745-517:2017) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-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 ASD, 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 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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 3745-517:2012.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

SS-EN 3745-517:2017 (E)**1 Scope**

This European Standard specifies a method of determining the attenuation variation of an optical cable when clamped to a mandrel with cable ties, simulating the condition in an installed harness.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2591-100, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 100: General*

EN 3745-201, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods — Part 201: Visual examination*

EN 3745-301, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods — Part 301: Attenuation*

EN 4056-003, *Aerospace series — Cable ties for harnesses — Part 003: Plastic cable ties, operating temperatures - 65 °C to 105 °C and - 65 °C to 150 °C — Product standard*

3 Preparation of specimens

3.1 The fibre ends shall conform to the fibre end preparation criteria specified in EN 2591-100.

3.2 The length of fibre to be tested shall be in accordance with the applicable product standard.

3.3 The specimens shall be subjected to standard test conditions and stabilized at these conditions for 24 h as defined in EN 2591-100.

3.4 The following details shall be specified if not already included in the product standard.

- Minimum number of cable ties, 6.
- Spacing between the cable ties shall be defined. If not the distance shall be 150 mm.
- Setting of the cable tie fitting tool.
- Mandrel diameter.
- Number of specimens (minimum 3)

The wavelengths to be measured if not 1300 nm and 850 nm.