BS EN 3745-411:2018

BSI Standards Publication

Aerospace series – Fibres and cables, optical, aircraft use – Test methods

Part 411: Resistance to fluids

bsi.

National foreword

This British Standard is the UK implementation of EN 3745-411:2018. It supersedes BS EN 3745-411:2007, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology.

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This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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European foreword

This document (EN 3745-411:2018) 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of an identical text or by endorsement, at the latest by May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

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 3745-411:2007.

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1 Scope

This European Standard specifies two methods of determining the fluid resistance of a cable.

It shall be used together with EN 3745-100 and EN 3909.

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 3745-100, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods — Part 100: General*

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

EN 3745-203, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods — Part 203: Cable dimensions*

EN 3745-503, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods — Part 503: Scrape abrasion*

EN 3909, *Aerospace series — Test fluids and test methods for electrical and optical components and sub-assemblies*

3 Test fluids

Unless otherwise specified in the product standard, all fluids listed in Table 1 are mandatory and are taken from EN 3909.

4 Cleaning

4.1 Initial cleaning

Unless otherwise specified in the product standard, the test sample shall be thoroughly cleaned to remove unrepresentative coatings i.e. preservatives, grease or contaminants.

When a separate sample is specified for each fluid, only initial cleaning applies.

4.2 Intermediate cleaning

If sequential testing is required, the product standard shall specify any necessary cleaning method.

When more than one fluid is to be applied to a test sample, the following should be considered:

— The need to assess the effect of individual fluids;

— The possibility of synergistic effects from applying successive fluids;

— If the order of exposure to fluids in service life is known, or if the exposure to fluids recognized as having synergistic effects is known and is possible in service life, then this order should be specified;

— Whether the test sample should be cleaned between or after the test.

NOTE Choice of cleaning fluid shall clearly not result in further contamination. Some of the specified fluids may be used as a cleaning fluid (e.g. aviation fuel, solvents, cleaning fluids) otherwise a fluid known to be used in normal cleaning procedures should be used.