



BSI Standards Publication

Aerospace series - Cable, electrical, fire resistant - Single and twisted multicore assembly, screened (braided) and jacketed - Operating temperatures between - 65 °C and 260 °C

Part 001: Technical specification

This is a preview of "BS EN 4608-001:2019". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 4608-001:2019. It supersedes BS EN 4608-001:2006, which is withdrawn.

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

A list of organizations represented on this committee can be obtained on request to its secretary.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Date	Text affected
30 September 2019	Implementation of CEN correction notice 04 September 2019: Supersession details added, CEN/CENELEC member list at the European Foreword updated

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EUROPÄISCHE NORM

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English Version

Aerospace series - Cable, electrical, fire resistant - Single and twisted multicore assembly, screened (braided) and jacketed - Operating temperatures between - 65 °C and 260 °C - Part 001: Technical specification

Série aérospatiale - Câbles électriques blindés résistant au feu - Simple et multifilaire blindé (tresse) gainé - Températures de fonctionnement comprises entre - 65 °C et 260 °C - Partie 001 : Spécification technique

Luft- und Raumfahrt - Feuerbeständige elektrische Leitungen - Einzel- und mehradrig verdrehte Leitungen, geschirmt (Geflecht) und ummantelt - Betriebstemperaturen zwischen -65 °C und 260 °C - Teil 001: Technische Lieferbedingungen

This European Standard was approved by CEN on 14 January 2019.

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



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

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European foreword

This document (EN 4608-001:2019) 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 December 2019, and conflicting national standards shall be withdrawn at the latest by December 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 4608-001:2006.

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

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1 Scope

This document specifies the required characteristics and test procedures for fire resistant or fire proof electrical cables for use in aircraft electrical systems. They shall be operated at a rated AC voltage of 600 V ac, a frequency of maximum 2 000 Hz and a long term temperature of up to 260 °C (ambient temperature plus temperatures rise in conductor).

These cables shall also maintain a specific dielectric strength when they are subjected to a flame of 1 100 °C after five (5) minutes (fire resistant) or 15 minutes (fire proof) exposure.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 2234, Aerospace series — *Cable, electrical, fire resistant — Technical specification*

EN 2235, Aerospace series — *Single and multicore electrical cables, screened and jacketed — Technical specification*

EN 3475-100 (all parts), Aerospace series — *Cables, electrical, aircraft use — Test methods — Part 100: General*

EN 3838, Aerospace series — *Requirements and tests on user-applied markings on aircraft electrical cables*

EN 4608-002, Aerospace series — *Cable, electrical, fire resistant — Single and twisted multicore assembly, screened (braided) and jacketed — Operating temperatures between - 65 °C and 260 °C — Part 002: General*

EN 4608-005, Aerospace series — *Cable, electrical, fire resistant — Single and twisted multicore assembly, screened (braided) and jacketed — Operating temperatures between - 65 °C and 260 °C — Part 005: DW family — Lightweight two-core gauge 24 for data transmission — UV Laser printable — Product standard*

EN 9133, Aerospace series — *Quality Management Systems — Qualification Procedure for Aerospace Standard Products*

ISO 2574, Aircraft — *Electrical cables — Identification marking* ¹⁾

TR 6058, Aerospace series — *Cable code identification list* ²⁾

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 3475-100 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

1) Published by : International Organization for Standardization (ISO), <http://www.iso.ch/>

2) Published as ASD-STAN Technical Report at the date of publication of this European Standard by AeroSpace and Defence industries Association of Europe - Standardization (ASD-STAN) (<http://www.asd-stan.org/>)