



BSI Standards Publication

Aerospace series - Cables, electrical, for general purpose, single and multicore assembly - XLETFE Family - Jacketed or screened and jacketed

Part 005: Tin plated copper - Operating temperatures, between -65°C and 135°C - Dual extruded wall for open applications, with jacket without screen - UV laser printable - Product standard

National foreword

This British Standard is the UK implementation of EN 4612-005:2019. It supersedes BS EN 4612-005:2011, which is withdrawn.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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English Version

Aerospace series - Cables, electrical, for general purpose, single and multicore assembly - XLETFE Family - Jacketed or screened and jacketed - Part 005: Tin plated copper - Operating temperatures, between - 65 °C and 135 °C - Dual extruded wall for open applications, with jacket without screen - UV laser printable - Product standard

Série aérospatiale - Câbles, électriques, d'usage général, mono et multiconducteurs - Famille XLETFE - Gainés ou blindés et gainés - Partie 005 : Cuivre étamé - Températures de fonctionnement comprises entre - 65 °C et 135 °C - Fil double isolé pour applications externes, gainé non blindé - Marquable au laser UV - Norme de produit

Luft- und Raumfahrt - Ein- und mehradrige elektrische Leitungen zur allgemeinen Verwendung - XLETFE-Familie - Ummantelt oder geschirmt und ummantelt - Teil 005: Kupfer verzinnt - Betriebstemperaturen zwischen -65 °C und 135 °C - doppelt extrudierte Isolierung für offene Anwendungen, ummantelt ohne Schirm - UV-Laser bedruckbar - Produktnorm

This European Standard was approved by CEN on 5 May 2019.

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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.

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

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European foreword

This document (EN 4612-005:2019) 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 February 2020, and conflicting national standards shall be withdrawn at the latest by February 2020.

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 4612-005:2011.

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, 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 and the United Kingdom.

1 Scope

This document specifies the characteristics of UV laser printable jacket, tin plated copper conductor, electrical cables, Crosslinked Ethylene Tetra Fluoro Ethylene co-polymer XLETFE family for use in the on-board electrical systems of aircraft at operating temperatures between – 65 °C and 135 °C operating at voltages not exceeding 600 V rms at sea level. This insulation system has been used in aerospace applications using 115 V (phase-to-neutral) 400 Hz ac and 28 Vdc. Verification of the suitability of cables for use in other electrical systems is the responsibility of the user.

These cables are suitable for airframe use without additional protection. In case of conflict between this standard and other referenced documents the requirements of this standard shall take precedence.

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 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 4611-004, *Aerospace series — Cables, electrical, for general purpose, single and multicore assembly — XLETFE Family — Part 004: Tin plated copper — Operating temperatures, between – 65 °C and 135 °C — Dual extruded wall for open applications — UV laser printable — Product standard*

EN 4612-002, *Aerospace series — Cables electrical, for general purpose, single and multicore assembly — XLETFE Family — Jacketed or screened and jacketed — Part 002: General*

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

3 Terms, definitions and symbols

For the purposes of this document, the terms, definitions and symbols 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>