



SLOVENSKI STANDARD
oSIST prEN 3719:2024
01-maj-2024

Aeronavtika - Vodniki za električne kable iz aluminija in aluminijevih zlitin - Standard za proizvod

Aerospace series - Aluminium or aluminium alloy conductors for electrical cables - Product standard

Luft- und Raumfahrt - Leiter aus Aluminium oder Aluminiumlegierung für elektrische Leitungen - Produktnorm

Série aérospatiale - Conducteurs en aluminium ou en alliage d'aluminium pour câbles électriques - Norme de produit

Ta slovenski standard je istoveten z: prEN 3719

[oSIST prEN 3719:2024](#)

<https://standards.iteh.ai/catalog/standards/sist/49-025-20/49-060/sist-pr-en-3719-2024>

ICS:

49.025.20	Aluminij	Aluminium
49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

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prEN 3719

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Will supersede EN 3719:2018

English Version

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Produktnorm

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (prEN 3719:2024) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 3719:2018.

prEN 3719:2024 includes the following significant technical changes with respect to EN 3719:2018:

- Correction of typo in the scope: 115 mm² inclusive rather than 107 mm² inclusive;
- Update of Clause 2 “Normative references”;
- Redrawing of Table 1 “Chemical composition of aluminium alloy”;
- Addition of conductor construction for cross-section code 115 in Table 3 “Conductor constructions with strand Ø 0,34 mm”.

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prEN 3719:2024 (E)**1 Scope**

This document specifies the dimensions, linear resistance, mechanical characteristics, construction and mass of conductors in aluminium or aluminium alloy for electrical cables for aerospace applications.

It applies to stranded conductors with nominal cross-sections of 5 mm² to 115 mm² inclusive.

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 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

EN 1715-2, *Aluminium and aluminium alloys — Drawing stock — Part 2: Specific requirements for electrical applications*

EN 3475,¹ *Aerospace series — Cables, electrical, aircraft use — Test methods*

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 terminology databases for use in standardization at the following addresses:

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

4 Conductor materials and construction

<https://standards.iteh.ai/catalog/standards/sist/fe7b5a1f-f251-4001-a080-db0b98dddf83/osist-pren-3719-2024>

4.1 Materials

The conductors in accordance with this document shall consist of individual annealed aluminium alloy EN AW-1110 [Al 99,1], (according to EN 573-3 and EN 1715-2) or aluminium alloy strands with the following composition specified in Table 1.

Table 1 — Chemical composition of aluminium alloy

Chemical composition	Element												Others		Al
		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	V	B	Each	Total		
%	min.	–	0,50	–	–	0,08	–	–	–	–	–	–	–	–	99,1
	max.	0,10	0,80	0,035	0,01	0,25	0,007	0,05	0,02	0,007	0,015	0,03	0,10	–	

4.2 Material for individual strands and code

The individual strands may be:

¹ All parts quoted in this document.