



**SLOVENSKI STANDARD**  
**oSIST prEN 4604-009:2024**  
**01-maj-2024**

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**Aeronavtika - Kabli, električni, za prenos signala - 009. del: Kabli, koaksialni, lahki, 50 ohmov, 180 °C, tip KW (lahki WN) - Standard za proizvod**

Aerospace series - Cable, electrical, for signal transmission - Part 009 : Cable, coaxial, light weight, 50 ohms, 180 °C, type KW (light WN) - Product standard

Luft- und Raumfahrt - Elektrische Leitungen für Signalübertragungen - Teil 009: Koaxialkabel, Leichtbauweise, 50 Ohm, 180 °C, Typ KW (WN Leichtbauweise) - Produktnorm

Série aérospatiale - Câbles électriques pour transmission de signaux - Partie 009 : Câble, coaxial, allégé 50 ohms, 180 °C, type KW (WN allégé) - Norme de produit

**Ta slovenski standard je istoveten z: prEN 4604-009**

<https://standards.iteh.ai/catalog/standards/sist/3f10e3e8-b0df-49d9-b570-0dedca607451/osist-pren-4604-009-2024>

**ICS:**

33.120.10	Koaksialni kabli. Valovodi	Coaxial cables. Waveguides
49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

**oSIST prEN 4604-009:2024**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 4604-009**

February 2024

ICS 49.060

Will supersede EN 4604-009:2017

English Version

**Aerospace series - Cable, electrical, for signal transmission  
- Part 009 : Cable, coaxial, light weight, 50 ohms, 180 °C,  
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Signalübertragungen - Teil 009: Koaxialkabel,  
Leichtbauweise, 50 Ohm, 180 °C, Typ KW (WN  
Leichtbauweise) - 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 4604-009:2024) 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 4604-009:2017.

prEN 4604-009:2024 includes the following significant technical changes with respect to EN 4604-009:2017:

- EN 4604-009 (P4), 03/2017 — Editorial improvements and update of subclause 4.3 to modify Table 3 and add Figure 2.

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**prEN 4604-009:2024 (E)****1 Scope**

This document specifies the required characteristics of a semi-rigid light weight coaxial cable, 50  $\Omega$ , type KW for use in aircraft electrical systems at operating temperature between  $-55\text{ }^{\circ}\text{C}$  and  $180\text{ }^{\circ}\text{C}$  and specially for high frequency up to 6 GHz. Nevertheless, if needed,  $-65\text{ }^{\circ}\text{C}$  is also acceptable as shown by rapid change of temperature test.

**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 3475 (all parts), *Aerospace series — Cables, electrical, aircraft use — Test methods*

EN 4434, *Aerospace series — Copper or copper alloy lightweight conductors for electrical cables — Product standard (Normal and tight tolerances)*

EN 4604-001, *Aerospace series — Cable, electrical, for signal transmission — Part 001: Technical specification*

EN 4604-002, *Aerospace series — Cable, electrical, for signal transmission — Part 002: General*

EN 3197,<sup>1</sup> *Aerospace series — Design and installation of aircraft electrical and optical interconnection systems*

ASTM-B566,<sup>2</sup> *Standard specification for copper-clad aluminium wire*

IEC 60096-0-1:2012+AMD1:2017 CSV, *3 Radio Frequency Cables — Part 0-1: Guidelines for the Design of Detailed Specifications — Coaxial Cables*

**3 Terms and definitions**

For the purposes of this document, the terms and definitions given in EN 3475-100 and the following 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/>

**3.1  
epsilon  
( $\epsilon$ )**

value of dielectric constant

Note 1 to entry: Refer to EN 4604-001.

<sup>1</sup> Published as ASD-STAN Standard at the date of publication of this document by ASD-STAN, <https://www.asd-stan.org/>.

<sup>2</sup> Published by: ASTM National (US) American Society for Testing and Materials. <https://www.astm.org/>.