

<b>STN</b>	<b>Letectvo a kozmonautika Teplov zmraštiteľné rúrky na viazanie, izoláciu a identifikáciu Časť 204: Identifikačné rúrky s obmedzeným požiarnym nebezpečenstvom pre prevádzkové teploty od -40 °C do 105 °C Norma na výrobok</b>	<b>STN EN 4708-204</b>
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Aerospace series - Sleeving, heat-shrinkable, for binding, insulation and identification - Part 204: Limited fire hazard identification sleeves - Operating Temperature range -40 °C to 105 °C - Product standard

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/24

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**EN 4708-204**

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English Version

Aerospace series - Sleeving, heat-shrinkable, for binding,  
insulation and identification - Part 204: Limited fire hazard  
identification sleeves - Operating Temperature range -40  
°C to 105 °C - Product standard

Série aérospatiale - Manchons thermorétractables, de  
jonction, isolement et identification - Partie 204 :  
Manchons d'identification à risque d'incendie limité -  
Températures d'utilisation -40 °C à 105 °C - Norme de  
produit

Luft- und Raumfahrt - Wärmeschrumpfender Schlauch  
zur Identifizierung - Teil 204: Identifikation-Hülse  
begrenzt Brandverhalten - Temperaturbereich -40 °C  
und 105 °C - Produktnormen

This European Standard was approved by CEN on 22 October 2023.

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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 (EN 4708-204:2023) 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 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 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

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.

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**EN 4708-204:2023 (E)****1 Scope**

This document specifies the required characteristics for heat-shrinkable limited fire hazard identification sleeves for use in aircraft electrical systems at operating temperatures between -40 °C and 105 °C.

This document is only applicable for the characterization of identification sleeves. This sleeving is flexible, flame retarded and emits minimum smoke, gases and corrosive by-products when exposed to fire. This sleeving is only applicable for use in areas where smoke, gases or corrosive by-products would constitute a particular hazard.

It is available with a shrink ratio of 2 : 1.

The product is normally supplied with internal diameters up to 51 mm.

The standard colours are white or yellow.

Sizes or colours other than those specifically listed in this document can be available. These items are considered to comply with this document if they comply with the property requirements listed in Table 2 and Table 3, except for dimensions and mass.

As the sleeving to be tested is a printed article, the complete system is to be recorded as part of the evaluation. The sleeve will only be considered as meeting the requirements of this document if printed with the printer, ribbon, inks and settings referenced within the test report.

Mark adherence and print permanence are determined in this specification using method EN 6059-407.

**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 3909:2016, *Aerospace series — Test fluids and test methods for electrical and optical components and sub-assemblies*

EN 4708-001:2019, *Aerospace series — Sleeving, heat-shrinkable, for binding, insulation and identification — Part 001: Technical specification*

EN 6059-402, *Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 402: Bending properties*

EN 6059-407:2019, *Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 407: Mark adherence and print permanence*

EN 60684-1, *Flexible insulating sleeving — Part 1: Definitions and general requirements*

EN 60684-2:2011, *Flexible insulating sleeving — Part 2: Methods of test*

EN IEC 60757, *Code for designation of colours*

ISO 846:2019, *Plastics — Evaluation of the action of microorganisms*

ISO 1817:2022, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 11075, *Aircraft — De-icing/anti-icing fluids — ISO type I*

ISO 11078, *Aircraft — De-icing/anti-icing fluids — ISO types II, III and IV*

ASTM D740-11<sup>1</sup>, *Standard Specification for Methyl Ethyl Ketone*

MIL-PRF-87937<sup>2</sup>, *Cleaning Compound, Aerospace Equipment*

SAE AMS 1428<sup>3</sup>, *Fluid, Aircraft Deicing/Anti-Icing, Non-Newtonian (Pseudoplastic), SAE Types II, III, and IV*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**

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<sup>1</sup> Published by ASTM American Society for Testing and Materials ([www.astm.org](http://www.astm.org)).

<sup>2</sup> Published by DoD National (US) Mil. Department of Defense (<http://www.defenselink.mil/>).

<sup>3</sup> Published by SAE International (US) Society of Automotive Engineers ([www.sae.org](http://www.sae.org)).