



SLOVENSKI STANDARD
oSIST prEN 4530-004:2023
01-julij-2023

Aeronavtika - Tesnilne puše za uporabo v veznih elementih - 004. del: Tesnilne puše za kable z zunanjim premerom od 3 mm do 5,8 mm - Standard za proizvod

Aerospace series - Sealing sleeves used in elements of connection - Part 004: Sealing sleeves for external diameter cable 3 mm to 5,8 mm - Product standard

Luft- und Raumfahrt - Dichtungshülse zur Verwendung in Verbindungselementen - Teil 004: Dichtungshülse für Leitungen mit einem Aussendurchmesser von 3 mm bis 5,8 mm - Produktnorm

Série aérospatiale - Manchons d'étanchéité utilisés dans les organes de connexion - Partie 004 : Manchons d'étanchéité pour câbles de diamètre extérieur 3 mm à 5,8 mm - Norme de produit

Ta slovenski standard je istoveten z: prEN 4530-004

ICS:

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems
--------	--	--

oSIST prEN 4530-004:2023

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 4530-004

May 2023

ICS 49.060

English Version

Aerospace series - Sealing sleeves used in elements of connection - Part 004: Sealing sleeves for external diameter cable 3 mm to 5,8 mm - Product standard

Série aérospatiale - Manchons d'étanchéité utilisés dans les éléments de connection - Partie 004: Manchon d'étanchéité pour des diamètres extérieur de cables de 3 mm à 5,8 mm - Produit standard

Luft- und Raumfahrt - Dichtungshülse zur Verwendung in Verbindungselementen - Teil 004: Dichtungshülse für Leitungen mit einem Aussendurchmesser von 3 mm bis 5,8 mm - 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.

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, Türkiye and United Kingdom.

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

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	5
4	Required characteristics	5
4.1	Specific characteristics	5
4.2	Dimensions and mass	5
4.3	Material	6
4.4	Assembly instructions	6
4.5	Tooling	6
4.6	Test	6
5	Designation	7
6	Marking	7
7	Delivery conditions	7
8	Technical specification	7
Annex A (informative) Amendment record sheet		8
Bibliography		9

(standards.iteh.ai)

[oSIST prEN 4530-004:2023](https://standards.iteh.ai/catalog/standards/sist/4f64899f-dc1f-4e4d-ae67-e9c8e8e73c9e/osist-pren-4530-004-2023)

<https://standards.iteh.ai/catalog/standards/sist/4f64899f-dc1f-4e4d-ae67-e9c8e8e73c9e/osist-pren-4530-004-2023>

European foreword

This document (prEN 4530-004:2023) 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 is currently submitted to the CEN Enquiry.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN 4530-004:2023](https://standards.iteh.ai/catalog/standards/sist/4f64899f-dc1f-4e4d-ae67-e9c8e8e73c9e/osist-pren-4530-004-2023)

<https://standards.iteh.ai/catalog/standards/sist/4f64899f-dc1f-4e4d-ae67-e9c8e8e73c9e/osist-pren-4530-004-2023>

prEN 4530-004:2023 (E)**1 Scope**

This document specifies the required characteristics and test applicable to sealing sleeves used in elements of connection according to EN 3155-002 and EN 4530-002.

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 2591-101, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 101: Visual examination*

EN 2591-102, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 102: Examination of dimensions and mass*

EN 2591-206, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 206: Measurement of insulation resistance*

EN 2591-207, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 207: Voltage proof test*

EN 2591-305, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 305: Rapid change of temperature*

EN 2591-306, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 306: Mould growth*

EN 2591-307, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 307: Salt mist*

EN 2591-311, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 311: Low air pressure*

EN 2591-312, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 312: Air leakage*

EN 2591-314, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 314: Immersion at low air pressure*

EN 2591-315, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 315: Fluid resistance*

EN 2591-316, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 316: Ozone resistance*

EN 2591-317, *Aerospace series - Elements of electrical and optical connection - Test methods - Part 317: Flammability*

EN 4530-001, *Aerospace series - Sealing sleeves used in elements of connection - Part 001: Technical specification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 4530-001 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/>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Required characteristics

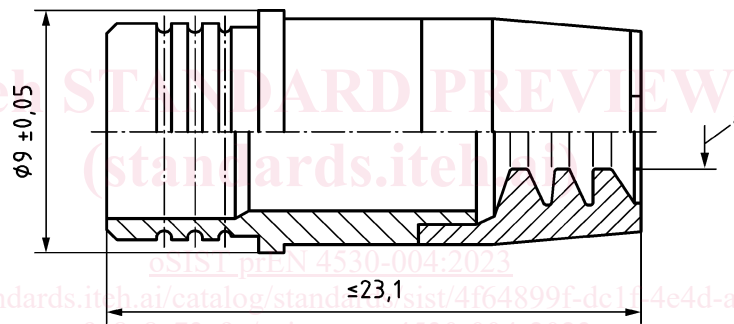
4.1 Specific characteristics

Sealing sleeves are for general application with an operating temperature range from -55 °C to 175 °C for S, T, L.

4.2 Dimensions and mass

Dimensions and mass shall be according to Figure 1 and Figure 2.

Dimensions and tolerances are given in millimetres.

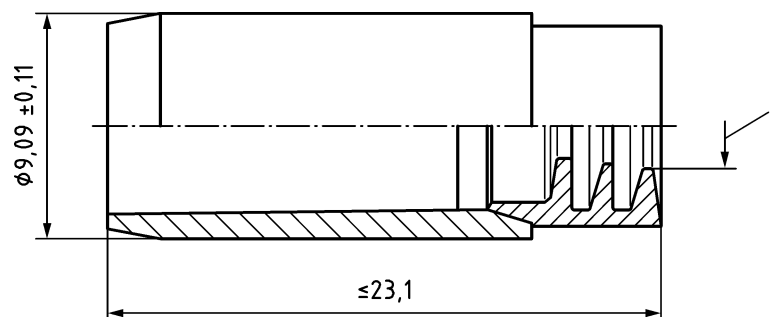


MASS = 1,8 g Max

Key

- a see Table 1 for permissible cable diameter

Figure 1 — (for S and L sleeve code)



Key

- a see Table 1 for permissible cable diameter

Figure 2 — (for T sleeve code)

prEN 4530-004:2023 (E)

Table 1 — Permissible cable diameter

Sleeve code	External diameter cable
S	3 mm to 3,8 mm
L	4,2 mm to 5,8 mm
T	3,8 mm to 5,15 mm

4.3 Material

Sleeve with sealing: Thermoplastic and silicone.

4.4 Assembly instructions

The sealing sleeve should be positioned over the cable prior to assembly of the contact onto the wire, the rigid side towards the connector. After contact insertion in the connector, the sleeve should be slid inside the cavity until it bottoms.

4.5 Tooling

Not applicable.

4.6 Test

The test shall be according to Table 2.

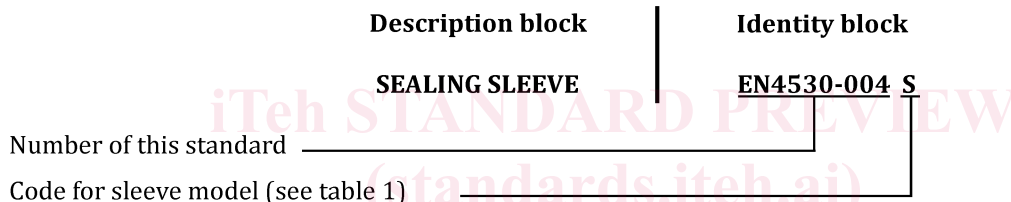
Table 2 — Test

EN 2591-	Test	Not applicable	Applicable	
			According to EN 4530-001	Remarks
101	Visual examination		X	
102	Examination of dimensions and mass		X	See 4.2
206	Measurement of insulation resistance		X	Done during test EN 2591-314 Mated connectors $\geq 1\ 000\ \text{M}\Omega$
207	Voltage proof test	X		
305	Rapid change of temperature		X	$T_A = (175_0^{+5})\ ^\circ\text{C}$ $T_B = (-55_0^{+5})\ ^\circ\text{C}$ $t_1 = (30_0^{+5})\ \text{min}$
306	Mould growth		X	Test conducted on materials Method A Duration: 28 days Growth: 0
307	Salt mist	X		

EN 2591-	Test	Not applicable	Applicable	
			According to EN 4530-001	Remarks
311	Low air pressure	X		
312	Air leakage		X	Use extruded cable for test
314	Immersion at low air pressure		X	Only for minimum cable diameter for each sleeve code.
315	Fluid resistance	X		
316	Ozone resistance	X		
317	Flammability		X	Method A

5 Designation

EXAMPLE



If necessary, the code I9005 shall be placed between the description block and the identity block.

6 Marking

Not applicable.

7 Delivery conditions

The sealing sleeves are packaged and identified individually. Conditioning shall provide protection of the sealing sleeves against any eventual damage.

Packaging shall include:

- the manufacturer's name;
- the designation defined in Clause 5;
- the manufacturer's reference;
- the manufacturing date code (year – week).

8 Technical specification

See EN 4530-001.

Annex A
(informative)

Amendment record sheet

Issue	Modified paragraph	Modification summary	Justification
Issue P1 11/07 Issue P2 07/10		<p style="text-align: center;">iTech STANDARD PREVIEW (standards.iteh.ai)</p> <p style="text-align: center;">oSIST prEN 4530-004:2023 https://standards.iteh.ai/catalog/standards/sist/4f64899f-dc1f-4e4d-ae67-e9c8e8e73c9e/osist-pr-en-4530-004-2023 New standard. New Dimensions</p>	

NOTE: Modifications to the last standard issue are indicated by a vertical line in the margin.