SLOVENSKI STANDARD
SIST EN 4199-005:2009

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Aeronavtika - Ozemljitvene zbiralke za letala - 005. del: Ploġļ ati pleteni bakreni vodniki, pocinkani od -65 ÁC do vkljuļ no 150 ÁC in ponikljani od -65 ÁC do vkljuļ no 260 ÁC - Standard za proizvod

Aerospace series - Bonding straps for aircraft - Part 005: Flat braid conductors copper, tin plated -65 °C up to 150 °C and copper, nickel plated, -65 °C up to 260 °C - Product standard

Luft und Raumfahrt - Masseverbinder für Luftfahrzeuge - Teil 005: Masseband, flache Geflechtsleiter Kupfer, verzinnt – 65° C bis 150° C und Kupfer, vernickelt – 65° C bis 260° C - Produktnorm

Série aérospatiale - Tresses de métallisation d'aéronefs - Partie 005 : Conducteurs à tresse plate, cuivrés, étamés entre -65°C et 150°C et cuivrés, nickelés entre -65°C et 260°C- Norme de produit

Ta slovenski standard je istoveten z: **EN 4199-005:2009**

ICS:

49.060	Letalska in vesoljska elektriļ na oprema in sistemi	Aerospace electric equipment and systems

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Aerospace series - Bonding straps for aircraft - Part 005: Flat braid conductors copper, tin plated -65 °C up to 150 °C and copper, nickel plated, -65 °C up to 260 °C - Product standard

Série aérospatiale - Tresses de métallisation pour avion - Partie 005 : Plat conducteur pour utilisation de - 65 °C à 150 °C en cuivre étamé et de - 65 °C à 260 °C en cuivre nickelé - Norme de produit

Luft und Raumfahrt - Masseverbinder für Luftfahrzeuge - Teil 005: Masseband, flache Geflechtsleiter Kupfer, verzinnt - 65 °C bis 150 °C und Kupfer, vernickelt - 65 °C bis 260 °C - Produktnorm

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Foreword

This document (EN 4199-005:2009) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

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of an identical text or by endorsement, at the latest by December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

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.

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1 Scope

This standard defines the characteristics of flat braided conductors copper tin or nickel plated for bonding straps according to EN 4199-001.

2 Normative references

The following referenced documents are indispensable for the application 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 2083, *Aerospace series — Copper or copper alloy conductors for electrical cables — Product standard.*

EN 2424, *Aerospace series — Marking of aerospace products.*

EN 4199-001, *Aerospace series — Bonding straps for aircraft — Part 001: Technical specification.*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 4199-001 apply.

4 Characteristics

4.1 Temperature rating

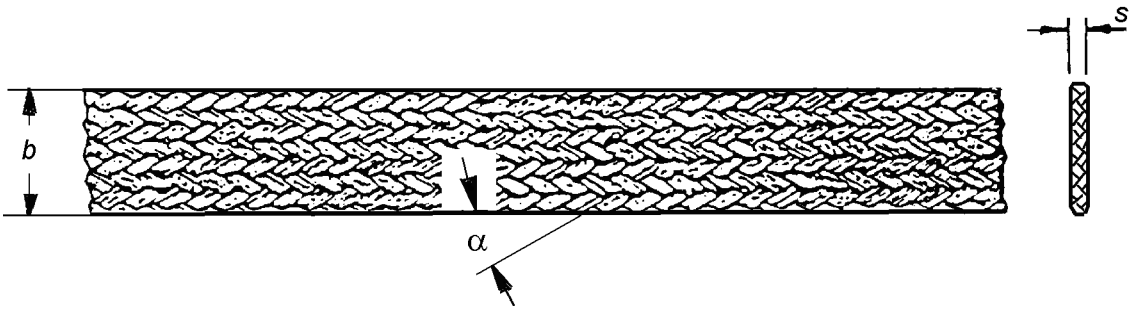
Flat braid copper conductors copper / tin plated – 65 °C to 150 °C and copper / nickel plated – 65 °C to 260 °C.

4.2 Material and finish

Single copper strands 0,10 mm diameter and larger shall be in accordance with EN 2083, and the same material and plating shall be used for strands smaller than 0,10 mm diameter.

5 Dimensions and mass

For dimensions and mass, see Figure 1 and Table 1.



α = angle of braid 10° - 35°

Figure 1

Table 1

Braid size code	Braid conductor cross section nom mm^2	Strand diameter nom mm	Construction of braid mm	*b* nom mm	*s* nom mm	Resistance at 20 °C under 1 A (± 10 %) Ω/km	Mass max. kg/km
A	4	0,071	24 × 44 × 0,071	8,2	1,0	4,70	40
B	6		24 × 66 × 0,071	10,0	1,3	3,4	63
C	10		24 × 110 × 0,071	14,0	1,5	2,0	115
D	16	0,10	24 × 84 × 0,10	17,5	2,0	1,3	160
E	25		24 × 132 × 0,10	21,0	2,4	0,80	262

6 Quality assurance

See EN 4199-001.

Flexure endurance shall be 1 000 cycles using a mandrel diameter 5*s* (5 times the nominal braid thickness). A suspended weight shall be applied; the mass to be sufficient to ensure that the braid remains in contact with the mandrel. As a guide, the mass should be calculated using the formula:

Nominal cross sectional area mm^2 × 150 g

Dimensions shall include braid angle.

7 Designation

EXAMPLE

Description block	Identity block
FLAT BRAID CONDUCTOR	EN4199-005AT

Number of this standard

Size code (see Table 1)

Finish (T = tin plated or N = nickel plated)

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

8 Marking

The marking of the flat braid conductor by label on reel or packaging shall include:

a) the designation as defined in this product standard

b) the date of manufacture

c) the manufacturers name or monogram in accordance with EN 2424 style F

d) the length

9 Packaging

To be packed on reels as agreed with the purchaser.