



**NSAI**  
Standards

Irish Standard  
I.S. EN 4199-004:2014

Aerospace series - Bonding straps for aircraft  
- Part 004: Round bonding straps, copper, tin  
plated -65 °C up to 150 °C and nickel plated -  
65 °C up to 260 °C - Product Standard

**I.S. EN 4199-004:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

**Aerospace series - Bonding straps for aircraft - Part 004: Round bonding straps, copper, tin plated -65 °C up to 150 °C and nickel plated -65 °C up to 260 °C - Product Standard**

Série aérospatiale - Tresses de métallisation pour avion -  
Partie 004 : Tresse ronde, en cuivre étamé de -65 °C à 150  
°C et en cuivre nickelé de -65 °C à 260 °C - Norme de  
produit

Luft- und Raumfahrt - Masseverbinder für Luftfahrzeuge -  
Teil 004: Runde Masseverbinder aus Kupfer verzinnt -65 °C  
bis 150 °C aus Kupfer vernickelt -65 °C bis 260 °C -  
Produktnorm

This European Standard was approved by CEN on 11 October 2014.

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## **Foreword**

This document (EN 4199-004:2014) 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 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.

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of an identical text or by endorsement, at the latest by May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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**EN 4199-004:2014 (E)****1 Scope**

This standard defines the required characteristics for round bonding straps in tin plated and nickel plated version, in different cross sections and lengths, with terminal lugs on both ends (same or different types) for aerospace applications.

It shall be used together with EN 4199-001.

**2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3373-001, *Aerospace series — Terminal lugs and in-line splices for crimping on electric conductors — Part 001: Technical specification*

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

EN 4199-006, *Aerospace series — Bonding straps for aircraft — Part 006: Round braid copper conductors for bonding straps, tin plated up to 150 °C or nickel plated up to 260 °C — Product standard*

EN 9133, *Aerospace series — Quality management systems — Qualification procedure for aerospace standard parts*

ISO 3:1973, *Preferred numbers — Series of preferred numbers*

**3 Terms and definitions**

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

**4 Required characteristics****4.1 Temperature range**

Bonding straps, copper, tin plated braid conductor and terminal lugs, class T : –65 °C up to 150 °C.

Bonding straps, copper, nickel plated braid conductor and terminal lugs, class N : –65 °C up to 260 °C.

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