



NSAI
Standards

Irish Standard
I.S. EN 6059-406:2014

Aerospace series - Electrical cables, installation - Protection sleeves - Test methods - Part 406: Vibration

I.S. EN 6059-406:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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Aerospace series - Electrical cables, installation - Protection sleeves - Test methods - Part 406: Vibration

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Luft- und Raumfahrt - Elektrische Leitungen, Installation - Schutzschläuche - Prüfverfahren - Teil 406: Vibration

This European Standard was approved by CEN on 27 December 2013.

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This European Standard exists 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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Foreword

This document (EN 6059-406:2014) 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of an identical text or by endorsement, at the latest by October 2014, and conflicting national standards shall be withdrawn at the latest by October 2014.

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EN 6059-406:2014 (E)

1 Scope

This European Standard specifies the method and means required for testing the vibration resistance of protection sleeve for electrical cable and cable bundles for aerospace application.

It shall be used together with EN 6059-100.

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 2266-004, *Aerospace series — Cables, electrical, for general purpose — Operating temperatures between - 55 °C and 200 °C — Part 004: CO2 laser printable — Product standard* ¹⁾

EN 2267-010, *Aerospace series — Cables, electrical, for general purpose — Operating temperatures between - 55 °C and 260 °C - Part 010: DR family, single UV laser printable — Product standard*

EN 3838, *Aerospace series — Requirements and tests on user-applied markings on aircraft electrical cables*

EN 6059-100, *Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 100: General*

ISO 7137, *Aircraft — Environmental conditions and test procedures for airborne equipment*

AS 23190²⁾, *Straps, clamps, and mounting hardware, plastic and metal for cable harness tying and support*

MS 21919E, *Clamp, loop type, cushioned, support* ³⁾

MIL-DTL-85052B, *Detail specification clamp, loop, cushion, general specification for* ³⁾

3 Preparation of specimens

The electrical cables used for this test shall comply with standard EN 2266-004B, or EN 2267-010, or aerospace cables according to EN 3838 approved for-the application, with 24 AWG to 18 AWG.

The cables shall be installed uniformly inside the sleeve to be tested.

Unless otherwise specified in the product standard the test sample shall be manufactured using:

- EN 2267-010 size 006 (20 AWG) single core cable,
- metal cushion cable clamps to AS 23190, MS 21919E or MIL-DTL-85052B,
- the bundle diameter shall be within 75 % to 85 % of the sleeves maximum inner diameter.

1) Published as ASD-STAN Prestandard at the date of publication of this standard. <http://www.asd-stan.org/>

2) Published by: SAE National (US) Society of Automotive Engineers. <http://www.sae.org/>

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

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