

Electrostatics - Part 4-6: Standard test methods for
specific applications - Wrist straps

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English Version

**Electrostatics - Part 4-6: Standard test methods for specific applications - Wrist straps
(IEC 61340-4-6:2015)**

Électrostatique - Partie 4-6: Méthodes d'essai normalisées pour des applications spécifiques - Bracelets de conduction dissipative
(IEC 61340-4-6:2015)

Elektrostatik - Teil 4-6: Standard-Prüfverfahren für spezielle Anwendungen - Handgelenkerdungsbänder
(IEC 61340-4-6:2015)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 101/463/FDIS, future edition 2 of IEC 61340-4-6, prepared by IEC/TC 101 "Electrostatics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61340-4-6:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-03-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-06-24

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61340-5-1	NOTE	Harmonized as EN 61340-5-1.
IEC/TR 61340-5-2	NOTE	Harmonized as CLC/TR 61340-5-2.

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INTRODUCTION

This part of IEC 61340 has been developed to establish test methods for evaluating the electrical and mechanical attributes of wrist straps used in an electrostatic control program. Wrist straps are intended to connect the user to electrical ground, thus preventing electrostatic charge on a user's body from attaining a level that may damage ESD susceptible devices or assemblies.

Test methods and performance limits for evaluation, acceptance, and functional testing are provided.

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ELECTROSTATICS –

Part 4-6: Standard test methods for specific applications – Wrist straps

1 Scope

This part of IEC 61340 provides electrical and mechanical test methods and performance limits for evaluation, acceptance and periodic verification testing of wrist straps.

NOTE All dimensions are nominal except where indicated.

This standard is intended for testing wrist straps and wrist strap systems used for the grounding of personnel engaged in working with ESD sensitive assemblies and devices.

It does not address constant monitoring systems.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1 wrist strap

assembled device consisting of a band and ground cord that is designed to provide electrical connection from a person's skin to ground

2.2 wrist strap system

wrist strap when properly worn by a person, where the electrical path includes the person, the band and the ground cord

2.3 band

portion of the wrist strap worn on the wrist

Note 1 to entry: The band maintains electrical contact with a person's skin.

2.4 ground cord

portion of the wrist strap that provides flexibility of movement while completing the electrical circuit between the band and ground

2.5 evaluation testing

testing of a wrist strap to determine its electrical and mechanical performance abilities

Note 1 to entry: Data are in the form of values from laboratory testing.

2.6 acceptance testing

incoming tests to confirm proper marking and electrical functionality

Note 1 to entry: Data are in the form of visual inspection records and values or pass/fail notation.