



NSAI
Standards

Irish Standard
I.S. EN 50212:2020

Connectors for thermoelectric sensors

I.S. EN 50212:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 50212:2020 is the adopted Irish version of the European Document EN 50212:2020, Connectors for thermoelectric sensors

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EUROPEAN STANDARD

EN 50212

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 93.120

Supersedes EN 50212:1996 and all of its amendments
and corrigenda (if any)

English Version

Connectors for thermoelectric sensors

Connecteurs pour capteurs thermoélectriques

Steckverbindungen für Thermoelemente

This European Standard was approved by CENELEC on 2020-03-09. CENELEC 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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

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European foreword

This document (EN 50212:2020) has been prepared by CLC/TC 65X “Industrial-process measurement, control and automation”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-03-09
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2023-03-09

This document supersedes EN 50212:1996 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

1 Scope

The object of this document is to determine the composition, nature of materials, manufacturing tests and thermoelectronic behaviour of connectors for sensors using thermocouples according to EN 60584-3:2008.

This document does not cover such special thermocouples as U, L and W types; nevertheless, the user of such special thermocouples can use the connectors described hereafter with some restrictions mentioned in the relevant paragraphs.

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.

IEC 60584 (series), *Thermocouples*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 General

4.1 Connector types

4.1.1 Connectors with specified dimensional characteristics

They are defined in this standard by their dimensional, physical, electrical and chemical characteristics.

The types retained in this standard are:

- A type: connectors with cylindrical pins and cylindrical sockets;
- B type: connectors with flat pins and flat sockets.

4.1.2 Other connectors

The electrical characteristics are identical to those defined for connectors described in 4.1.1. Withdrawal tests, waterproof and dustproof tests, corrosion tests, test for resistance to heat will be stated by the manufacturer as list of technical characteristics.

The dimensional, physical and chemical characteristics peculiar to each manufacturer are not specified.

4.2 Marking for identification and polarities

The connectors shall comprise a permanent colour marking, e.g. either indelible superficial or mass colouring, or recessed coloured dots or coloured rings, etc.

At least the + polarity shall be indicated by permanent marking. Though non-compulsory, to avoid confusion with previous markings, or markings in other standards, the thermocouple type may be also additionally indicated, see Table 1.

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