



NSAI
Standards

Irish Standard
I.S. EN ISO 80000-12:2019

Quantities and units - Part 12: Condensed matter physics (ISO 80000-12:2019)

I.S. EN ISO 80000-12:2019

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN ISO 80000-12:2019 is the adopted Irish version of the European Document EN ISO 80000-12:2019, Quantities and units - Part 12: Condensed matter physics (ISO 80000-12:2019)

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EUROPEAN STANDARD

EN ISO 80000-12

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2019

ICS 01.060

Supersedes EN ISO 80000-12:2013

English Version

Quantities and units - Part 12: Condensed matter physics (ISO 80000-12:2019)

Grandeurs et unités - Partie 12: Physique de la matière
condensée (ISO 80000-12:2019)

Größen und Einheiten - Teil 12: Physik der
kondensierten Materie (ISO 80000-12:2019)

This European Standard was approved by CEN on 5 May 2019.

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EN ISO 80000-12:2019 (E)

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European foreword

This document (EN ISO 80000-12:2019) has been prepared by Technical Committee ISO/TC 12 "Quantities and units" in collaboration with Technical Committee CEN/SS F02 "Units and symbols" the secretariat of which is held by CCMC.

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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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

This document supersedes EN ISO 80000-12:2013.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 80000-12:2019 has been approved by CEN as EN ISO 80000-12:2019 without any modification.

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INTERNATIONAL STANDARD

**ISO
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Quantities and units —

Part 12:

Condensed matter physics

Grandeurs et unités —

Partie 12: Physique de la matière condensée



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ISO 80000-12:2019(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 12, *Quantities and units*, in collaboration with Technical Committee IEC/TC 25, *Quantities and units*.

This second edition cancels and replaces the first edition (ISO 80000-12:2009), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the table giving the quantities and units has been simplified;
- some definitions and the remarks have been stated physically more precisely.

A list of all parts in the ISO 80000 and IEC 80000 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Quantities and units —

Part 12: Condensed matter physics

1 Scope

This document gives names, symbols, definitions and units for quantities of condensed matter physics. Where appropriate, conversion factors are also given.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

Names, symbols, definitions and units for quantities used in condensed matter physics are given in [Table 1](#).

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

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

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