

INTERNATIONAL STANDARD

**Ferrite cores – Dimensions –
Part 12: Ring cores**





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**Ferrite cores – Dimensions –
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FERRITE CORES – DIMENSIONS –

Part 12: Ring cores

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62317-12 has been prepared IEC technical committee 51: Magnetic components, ferrite and magnetic powder materials.

This first edition cancels and replaces the first edition of IEC TR 61604 published in 1997. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC TR 61604:

- a) amendment of Clause 5 concerning the relationship between standard of European, Japanese and U.S.A. sizes;
- b) addition of Subclause 5.3 concerning coating.

The text of this standard is based on the following documents:

CDV	Report on voting
51/1128/CDV	51/1143/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62317 series, under the general title *Ferrite cores – Dimensions*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

FERRITE CORES – DIMENSIONS –

Part 12: Ring cores

1 Scope

This part of IEC 62317 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of ring-cores, also called toroid cores, and the effective parameter values to be used in calculations involving them.

The selection of core sizes for this document is based on the philosophy of including those sizes which are industrial standards, meaning that they are in broad-based use within industry. See IEC 62317-1 for more detail concerning the philosophy of selecting core sizes to be included.

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 60205, *Calculation of the effective parameters of magnetic piece parts*

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 Abbreviated terms

ID inside diameter
OD outside diameter

5 Primary standards

5.1 General

Compliance with the following requirements ensures mechanical interchangeability of complete assemblies and wound coils.

5.2 Dimensions of ring-cores

5.2.1 Designation of dimensions

Table 1 describes the alphabetic character assignments for the dimensions of ferrite ring cores.