

INTERNATIONAL STANDARD

**Ferrite cores – Guidelines on dimensions and the limits of surface
irregularities –
Part 8: E-cores**



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Part 8: E-cores**

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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Primary dimensions	6
4.1 General.....	6
4.2 Dimensions of E-cores	7
4.2.1 Main dimensions.....	7
4.2.2 Effective parameter and A_{\min} values	9
4.3 Dimensional limits for coil formers	11
5 Limits of surface irregularities	15
5.1 General.....	15
5.2 Examples of surface irregularities	15
5.3 Chips and ragged edges	15
5.3.1 General	15
5.3.2 Chips and ragged edges on the mating surfaces.....	15
5.3.3 Chips and ragged edges on the other surfaces	15
5.4 Cracks	18
5.5 Flash	18
5.6 Pull-outs	18
5.7 Crystallites.....	19
5.8 Pores	19
Annex A (normative) Derived standards	21
Annex B (normative) Example of dimensions for gauges to check the dimensions of E-cores complying with this document	22
B.1 General.....	22
B.2 Procedure and requirements	24
Annex C (informative) Reference of allowable areas of chips.....	25
Bibliography.....	26
Figure 1 – Dimensions of E-cores with rectangular cross-section	7
Figure 2 – Main dimensions of coil formers	12
Figure 3 – Examples of surface irregularities	15
Figure 4 – Chip location for E-cores	16
Figure 5 – Crack and pull-out locations for E-cores	18
Figure 6 – Crystallite location for E-cores	19
Figure 7 – Pore location for E-cores.....	20
Figure B.1 – Gauge dimensions	22
Table 1 – Dimensions of E-cores with rectangular cross-section	8
Table 2 – Effective parameter and A_{\min} values.....	10
Table 3 – Dimensional limits for coil formers	13
Table 4 – Area and length reference for visual inspection	17
Table 5 – Limits for cracks	19

Table B.1 – Gauge dimensions	23
Table C.1 – Allowable areas of chips for E-cores	25

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FERRITE CORES – GUIDELINES ON DIMENSIONS
AND THE LIMITS OF SURFACE IRREGULARITIES –****Part 8: E-cores****FOREWORD**

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International Standard IEC 63093-8 has been prepared by IEC technical committee 51: Magnetic components, ferrite and magnetic powder materials.

This first edition cancels and replaces the first edition of IEC 62317-8 published in 2006 and the second edition of IEC 60424-3 published in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 62317-8:2006 and IEC 60424-3:2015:

- a) This document integrates IEC 62317-8:2006 and IEC 60424-3:2015;
- b) Table 4 – Allowable areas of chips for E-cores, of IEC 60424-3:2015, has been moved to Annex C (informative) of this document.

The text of this International Standard is based on the following documents:

CDV	Report on voting
51/1213/CDV	51/1235/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 in the IEC 63093 series, published under the general title *Ferrite cores – Guidelines on dimensions and the limits of surface irregularities*, 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 – GUIDELINES ON DIMENSIONS AND THE LIMITS OF SURFACE IRREGULARITIES –

Part 8: E-cores

1 Scope

This part of IEC 63093 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of E-cores made of ferrite and the essential dimensions of coil formers to be used with them, as well the effective parameter values to be used in calculations involving them. It also gives guidelines on allowable limits of surface irregularities applicable to E-cores.

The specifications contained in this document are useful in negotiations between ferrite core manufacturers and customers about surface irregularities.

The use of derived standards, which give more detailed specifications of component parts while still permitting compliance with this standard, is discussed in Annex A.

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*

IEC 60401-1, *Terms and nomenclature for cores made of magnetically soft ferrites – Part 1: Terms used for physical irregularities*

IEC 60424-1, *Ferrite cores – Guidelines on the limits of surface irregularities – Part 1: General specification*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in IEC 60401-1 and IEC 60424-1 apply.

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 Primary dimensions

4.1 General

Compliance with the following requirements ensures mechanical interchangeability of complete assemblies and coil formers.