

Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 10: PM-cores and associated parts

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English Version

Ferrite cores - Guidelines on dimensions and the limits of
surface irregularities - Part 10: PM-cores and associated parts
(IEC 63093-10:2022)

Noyaux ferrites - Lignes directrices relatives aux
dimensions et aux limites des irrégularités de surface -
Partie 10: Noyaux PM et parties associées
(IEC 63093-10:2022)

Ferritkerne - Richtlinien zu Maßen und Grenzen von
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European foreword

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Ferrite cores – Guidelines on dimensions and the limits of surface irregularities –

Part 10: PM-cores and associated parts

Noyaux ferrites – Lignes directrices relatives aux dimensions et aux limites des irrégularités de surface –

Partie 10: Noyaux PM et parties associées



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Ferrite cores – Guidelines on dimensions and the limits of surface
irregularities –
Part 10: PM-cores and associated parts**

**Noyaux ferrites – Lignes directrices relatives aux dimensions et aux limites des
irrégularités de surface –
Partie 10: Noyaux PM et parties associées**

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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 PM-cores	7
4.2.1 Principal dimensions.....	7
4.2.2 Effective parameter and $A_{\min}$ values	8
4.3 Main dimensions of coil formers	8
4.4 Pin locations and base outlines	9
4.5 Pin diameter	9
5 Mounting hardware	9
6 Limits of surface irregularities	10
6.1 General.....	10
6.2 Examples of surface irregularities	10
6.3 Chips and ragged edges	11
6.3.1 General	11
6.3.2 Chips and ragged edges located on the mating surface	11
6.3.3 Chips and ragged edges located on other surfaces	12
6.4 Cracks	12
6.5 Pull-out	13
6.6 Crystallites	14
6.7 Flash	14
6.8 Pores	15
Annex A (normative) Derived standards	16
Annex B (normative) Example of a gauge to check the coil former space dimensions of PM-cores meeting the IEC primary standard	17
Annex C (informative) Recommended main dimensions for mounting hardware	18
Annex D (informative) Limits of allowable chipping areas	20
Figure 1 – Main dimensions of PM-cores	7
Figure 2 – Main dimensions of coil formers	8
Figure 3 – Pin locations and base outlines viewed from the underside of the board	10
Figure 4 – Examples of surface irregularities	11
Figure 5 – Chips on mating surfaces	12
Figure 6 – Locations of cracks	13
Figure 7 – Location of pull-out	14
Figure 8 – Location of a crystallite	14
Figure 9 – Location of a flash.....	15
Figure 10 – Location of pore	15
Figure B.1 – Example of a gauge	17
Figure C.1 – Main dimensions of mounting hardware	18

Table 1 – Main dimensions of PM-cores.....	7
Table 2 – Effective parameter and $A_{\min}$ values.....	8
Table 3 – Main dimensions of coil formers	9
Table 4 – Limits for cracks	13
Table B.1 – Example of a gauge	17
Table C.1 – Main dimensions of U-bolt.....	18
Table C.2 – Main dimensions of base plate.....	19
Table D.1 – Limits of allowable chipping areas.....	20

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**FERRITE CORES – GUIDELINES ON DIMENSIONS
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IEC 63093-10 has been prepared by IEC technical committee 51: Magnetic components, ferrite and magnetic powder materials. It is an International Standard.

This first edition cancels and replaces the first edition IEC 61247 published in 1995. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the first edition of IEC 61247:

- a) the calculations of the effective parameter values have been updated according to IEC 60205;
- b) added the limits of surface irregularities.

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

Draft	Report on voting
51/1388/CDV	51/1408/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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FERRITE CORES – GUIDELINES ON DIMENSIONS AND THE LIMITS OF SURFACE IRREGULARITIES –

Part 10: PM-cores and associated parts

1 Scope

This part of IEC 63093 specifies the dimensions that are of importance for mechanical interchangeability for a preferred range of PM-cores made of magnetic oxides, the main dimensions for coil formers to be used with these cores and the locations of their pins on a modular printed wiring grid in relation to the base outlines of cores. It also specifies the effective parameter values to be used in calculations and gives guidelines on allowable limits of surface irregularities applicable to the PM-cores.

The use of derived standards which give more detailed specifications of component parts whilst still permitting compliance with this document 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 and reference of dimensions*

IEC 63093-1:2020, *Ferrite cores – Guidelines on dimensions and the limits of surface irregularities – Part 1: General specification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60401-1 and IEC 63093-1 apply.

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4 Primary dimensions

4.1 General

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