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

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This standard includes the English version of the European Standard.

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**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
Oberflächenbeschädigungen - Teil 10: PM-Kerne und
zugehörige Teile
(IEC 63093-10:2022)

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EN IEC 63093-10:2022 (E)**European foreword**

The text of document 51/1388/CDV, future edition 1 of IEC 63093-10, prepared by IEC/TC 51 "Magnetic components, ferrite and magnetic powder materials" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63093-10:2022.

The following dates are fixed:

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Annex ZA
(normative)**Normative references to international publications
with their corresponding European publications**

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NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60205	-	Calculation of the effective parameters of magnetic piece parts	EN 60205	-
IEC 60401-1	-	Terms and nomenclature for cores made of magnetically soft ferrites - Part 1: Terms used for physical irregularities and reference of dimensions	EN IEC 60401-1	-
IEC 63093-1	2020	Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 1: General specification	EN IEC 63093-1	2020



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INTERNATIONAL STANDARD

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**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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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.

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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

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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*

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