



SLOVENSKI STANDARD
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**Feritna jedra - Smernice o merah in mejnih vrednostih površinskih nepravilnosti -
12. del: Obročasta jedra**

Ferrite cores - Guidelines on dimensions and the limits of surface irregularities - Part 12:
Ring-cores

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Ta slovenski standard je istoveten z: EN IEC 63093-12:2019
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ICS:

29.100.10 Magnetne komponente Magnetic components

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EN 60424-4:2016

English Version

**Ferrite cores - Guidelines on dimensions and the limits of
surface irregularities - Part 12: Ring-cores
(IEC 63093-12:2019)**

Noyaux ferrites - Lignes directrices relatives aux
dimensions et aux limites des irrégularités de surface -
Partie 12: Noyaux toriques
(IEC 63093-12:2019)

Ferritkerne - Richtlinien zu Maßen und Grenzen von
Oberflächenbeschädigungen - Teil 12: Ringkerne
(IEC 63093-12:2019)

This European Standard was approved by CENELEC on 2019-05-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63093-12:2019 (E)**European foreword**

The text of document 51/1271/FDIS, future edition 1 of IEC 63093-12, 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 63093-12:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-02-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-05-09

This document supersedes EN 62317-12:2016 and EN 60424-4:2016

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

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Endorsement notice

SIST EN IEC 63093-12:2019

The text of the International Standard IEC 63093-12:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60401-2	NOTE	Harmonized as EN 60401-2
IEC 60424-4	NOTE	Harmonized as EN 60424-4
IEC 62317-1	NOTE	Harmonized as EN 62317-1

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

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	EN 60401-1	-
IEC 60424-1	-	Ferrite cores - Guidelines on the limits of surface irregularities - Part 1: General specification	EN 60424-1	-

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IEC 63093-12

Edition 1.0 2019-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Ferrite cores – Guidelines on dimensions and the limits of surface irregularities –
Part 12: Ring-cores**

(standards.iteh.ai)

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

Partie 12: Noyaux toriques

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FERRITE CORES – GUIDELINES ON DIMENSIONS
AND THE LIMITS OF SURFACE IRREGULARITIES –****Part 12: Ring-cores**

FOREWORD

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International Standard IEC 63093-12 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 62317-12 published in 2016 and the second edition of IEC 60424-4 published in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 62317-12:2016 and IEC 60424-4:2015:

- a) IEC 63093-12 integrates the contents of IEC 62317-12:2016 and IEC 60424-4:2015.

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

FDIS	Report on voting
51/1271/FDIS	51/1284/RVD

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.

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

Part 12: Ring-cores

1 Scope

This part of IEC 63093 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. It also gives guidelines on allowable limits of surface irregularities applicable to ring-cores.

This document is a specification useful in the negotiations between ferrite core manufacturers and users about surface irregularities.

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*

[SIST EN IEC 63093-12:2019](http://standards.iteh.ai/SIST/EN/IEC/63093-12-2019)

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 purposes 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 wound coils.