



# SLOVENSKI STANDARD

## SIST EN 62358:2013

01-marec-2013

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### Feritna jedra - Standardni faktor induktance za jedra z režo in njegove tolerance

Ferrite cores - Standard inductance factor for gapped cores and its tolerance

Ferritkerne - Standard-Induktivitätsfaktor für Kerne mit Luftspalt und dessen Toleranz

Noyaux de ferrite - Inductance spécifique normalisée pour noyaux à entrefer et tolérances associées

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**Ta slovenski standard je istoveten z: EN 62358:2012**

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#### **ICS:**

29.100.10      Magnetne komponente      Magnetic components

**SIST EN 62358:2013**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 62358**

December 2012

ICS 29.100.10

Supersedes EN 62358:2004

English version

**Ferrite cores -  
Standard inductance factor for gapped cores and its tolerance  
(IEC 62358:2012)**

Noyaux de ferrite -  
Inductance spécifique normalisée pour  
noyaux à entrefer et tolérances associées  
(CEI 62358:2012)

Ferritkerne -  
Standard-Induktivitätsfaktor für Kerne mit  
Luftspalt und dessen Toleranz  
(IEC 62358:2012)

**iTeh STANDARD PREVIEW**

This European Standard was approved by CENELEC on 2012-11-16. 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.

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**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 51/1005/FDIS, future edition 2 of IEC 62358, prepared by IEC TC 51, "Magnetic components and ferrite materials" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62358:2012.

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) 2013-08-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-11-16

This document supersedes EN 62358:2004.

EN 62358:2012 includes the following significant technical changes with respect to EN 62358:2004:

- a) addition of  $AL$  value (inductance factor) and its tolerance for PQ-cores;
- b) addition of  $AL$  value (inductance factor) and its tolerance for EFD-cores;
- c) addition of  $AL$  value (inductance factor) and its tolerance for Low-profile ER-I-cores;
- d) addition of  $AL$  value (inductance factor) and its tolerance for Low-profile ER-cores (ER9,5 × 2,5 × 5, ER11 × 2,5 × 6, ER14,5 × 3 × 7 ferrite cores are same as in EN 62358:2004);
- e) addition of  $AL$  value (inductance factor) and its tolerance for Low-profile PQ-I-cores.

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## Endorsement notice

The text of the International Standard IEC 62358:2012 was approved by CENELEC as a European Standard without any modification.

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

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61185	-	Ferrite cores (ETD-cores) intended for use in power supply applications - Dimensions	EN 61185	-
IEC 61596	-	Magnetic oxide EP-cores and associated parts for use in inductors and transformers - Dimensions	EN 61596	-
IEC 62044-2	-	Coresh made of soft magnetic materials - Measuring methods - Part 2: Magnetic properties at low excitation level	EN 62044-2	-
IEC 62317-2	-	Ferrite cores - Dimensions - Part 2: Pot-cores for use in telecommunications, power supply, and filter applications	EN 62317-2	-
IEC 62317-4	-	Ferrite cores - Dimensions - Part 4: RM-cores and associated parts	EN 62317-4	-
IEC 62317-7	-	Ferrite cores - Dimensions - Part 7: EER-cores	EN 62317-7	-
IEC 62317-8	-	Ferrite cores - Dimensions - Part 8: E-cores	EN 62317-8	-
IEC 62317-9	-	Ferrite cores - Dimensions - Part 9: Planar cores	EN 62317-9	-
IEC 62317-13	-	Ferrite cores - Dimensions - Part 13: PQ-cores for use in power supply applications	EN 62317-13	-
ISO 497	-	Guide to the choice of series of preferred numbers and series containing more rounded values of preferred numbers	-	-

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IEC 62358

Edition 2.0 2012-10

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Ferrite cores – Standard inductance factor for gapped cores and its tolerance**

**Noyaux de ferrite – Inductance spécifique normalisée pour noyaux à entrefer et tolérances associées**

[SIST EN 62358:2013](https://standards.iteh.ai/catalog/standards/sist/a716fe35-4df4-4342-8280-d7b012b869a7/sist-en-62358-2013)

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**FERRITE CORES – STANDARD INDUCTANCE  
FACTOR FOR GAPPED CORES AND ITS TOLERANCE**

## FOREWORD

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International Standard IEC 62358 has been prepared by IEC technical committee 51: Magnetic components and ferrite materials.

This second edition cancels and replaces the first edition published in 2004. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous editions:

- a) addition of  $A_L$  value (inductance factor) and its tolerance for PQ-cores;
- b) addition of  $A_L$  value (inductance factor) and its tolerance for EFD-cores;
- c) addition of  $A_L$  value (inductance factor) and its tolerance for Low-profile ER-I-cores;
- d) addition of  $A_L$  value (inductance factor) and its tolerance for Low-profile ER-cores (ER9,5 × 2,5 × 5, ER11 × 2,5 × 6, ER14,5 × 3 × 7 ferrite cores are same as the previous edition);
- e) addition of  $A_L$  value (inductance factor) and its tolerance for Low-profile PQ-I-cores.

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

FDIS	Report on voting
51/1005/FDIS	51/1008/RVD

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

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

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

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

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## INTRODUCTION

The  $A_L$  value (inductance factor) and its tolerance have been specified by the users before. When manufacturers wish to have an inventory for short delivery, they have to hold the products before gapping since there is no standard for the  $A_L$  value. Because of electronic commerce and the increased demand for rapid delivery of products, it will be more convenient for customers and suppliers to refer to established  $A_L$  values and tolerances. This standard has been developed to meet this demand.

As a result of the implementation of this standard, it will be easier for core suppliers and users to develop electronic components using gapped soft ferrite cores. Conventional businesses will benefit, as will new companies working in new fields such as e-commerce.

It is recommended that users specify  $A_L$  values by selecting them from this standard. The tolerances in this standard are recommended, but for historical reasons a manufacturer's specification might differ for some components. Users should confirm tolerances from the manufacturer's literature. Manufacturers are encouraged to use the  $A_L$  values in this standard when building stocks of gapped cores for short delivery. In cases where users or manufacturers specify a gap length with tolerances the  $A_L$  value will only be approximate and without tolerance. Such cases will be outside the scope of this standard.

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