

This document is a preview generated by EVS

Packaging of components for automatic handling - Part 1: Tape packaging of components with axial leads on continuous tapes

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60286-1:2017 sisaldb Euroopa standardi EN 60286-1:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 60286-1:2017 consists of the English text of the European standard EN 60286-1:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.11.2017.	Date of Availability of the European standard is 17.11.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 31.020, 31.240

Standardite reproduutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60286-1

November 2017

ICS 31.020; 31.240

Supersedes EN 60286-1:1998

English Version

Packaging of components for automatic handling -
Part 1: Tape packaging of components with axial leads
on continuous tapes
(IEC 60286-1:2017)

Emballage des composants pour opérations automatisées -
Partie 1: Emballage des composants à sorties axiales
en bandes continues
(IEC 60286-1:2017)

Gurtung und Magazinierung von Bauelementen für
automatische Verarbeitung - Teil 1: Gurtung von
Bauelementen mit axialen Anschlüssen
(IEC 60286-1:2017)

This European Standard was approved by CENELEC on 2017-08-30. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 40/2538/FDIS, future edition 3 of IEC 60286-1, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60286-1:2017.

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) 2018-05-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-08-30

This document supersedes EN 60286-1:1998.

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.

Endorsement notice

The text of the International Standard IEC 60286-1:2017 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 60286-2	NOTE	Harmonized as EN 60286-2.
IEC 60286-3	NOTE	Harmonized as EN 60286-3.
IEC 60301	NOTE	Harmonized as EN 60301.

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 60294	-	Measurement of the dimensions of a cylindrical component with axial terminations	EN 60294	-
ISO 11469	-	Plastics - Generic identification and marking of plastics products	EN ISO 11469	-

CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Dimensions.....	5
4.1 Dimensions common to tapes and taped components with axial leads	5
4.1.1 General	5
4.1.2 Body location (permissible lateral deviation)	7
4.1.3 Tape spacing	7
4.2 Taping	7
4.2.1 General	7
4.2.2 Orientation of polarized components.....	8
4.2.3 Position, kinks and bends of the leads	8
4.2.4 The ends of the leads	8
4.2.5 Holding in the tape	8
4.2.6 Requirements of tape material, storage, and handling	8
4.2.7 Splices of tape.....	8
4.2.8 Leader tape	8
5 Packing	8
5.1 General.....	8
5.2 Dimensions of the reel	9
5.3 Distances W_1 and W_2	9
5.4 Recycling	9
5.5 Protection of components	9
5.6 Reel filling.....	9
5.7 Dimensions of the fan-fold container	10
5.8 Missing components	10
6 Marking	10
Annex A (informative) Cross-reference for references to the previous edition of this document.....	11
Bibliography.....	12
Figure 1 – Dimensions for tape packaging of components with axial leads	6
Figure 2 – Reel dimensions	9
Figure 3 – Outer dimensions of the fan-fold arrangement.....	10
Table 1 – Tape widths and permissible variation	6
Table 2 – Component spacing and permissible deviation	7
Table 3 – Tape spacing.....	7
Table A.1 – Cross-reference to clauses	11