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Flexible insulating sleeving - Part 3: Specifications for individual types of sleeving - Sheet 281: Heat-shrinkable, polyolefin sleeving, semiconductive

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/25

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60684-3-281

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English Version

Flexible insulating sleeving - Part 3: Specifications for individual types of sleeving - Sheet 281: Heat-shrinkable, polyolefin sleeving, semiconductive (IEC 60684-3-281:2025)

Gaines isolantes souples - Partie 3: Spécifications pour types particuliers de gaines - Feuille 281: Gaines thermorétractables en polyoléfine, semiconductrices (IEC 60684-3-281:2025)

Isolierschläuche - Teil 3: Anforderungen für einzelne Schlauchtypen - Blatt 281: Halbleitende Polyolefin-Wärmeschrumpfschläuche (IEC 60684-3-281:2025)

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EN IEC 60684-3-281:2025 (E)**European foreword**

The text of document 15/1044/FDIS, future edition 2 of IEC 60684-3-281, prepared by TC 15 "Solid electrical insulating materials" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60684-3-281:2025.

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IEC 60684-3 (series) NOTE Approved as EN 60684-3-420 to 422 (series)

Annex ZA **(normative)**

Normative references to international publications with their corresponding European publications

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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 60296	-	Fluids for electrotechnical applications - Mineral insulating oils for electrical equipment	EN IEC 60296	-
IEC 60684-1	-	Flexible insulating sleeving - Part 1: Definitions and general requirements	EN 60684-1	-
IEC 60684-2	2025	Flexible insulating sleeving - Part 2: Methods of test	EN IEC 60684-2	2025
IEC 60757	-	Code for designation of colours	EN IEC 60757	-



IEC 60684-3-281

Edition 2.0 2025-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Flexible insulating sleeving –
Part 3: Specifications for individual types of sleeving – Sheet 281: Heat-
shrinkable, polyolefin sleeving, semiconductive**

**Gaines isolantes souples –
Partie 3: Spécifications pour types particuliers de gaines – Feuille 281: Gaines
thermorétractables en polyoléfine, semiconductrices**

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CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Designation	7
5 Conditions of test	7
6 Requirements	7
7 Sleeving conformance	7
Annex A (informative) Guidance on the available sizes and wall thicknesses	11
Bibliography.....	12
Table 1 – Property requirements	8
Table 2 – Resistance to selected fluids	9
Table A.1 – Type A, thin wall	11
Table A.2 – Type B, medium wall.....	11

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FLEXIBLE INSULATING SLEEVING –

**Part 3: Specifications for individual types of sleeving –
Sheet 281: Heat-shrinkable, polyolefin sleeving, semiconductive**

FOREWORD

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IEC 60684-3-281 has been prepared by IEC technical committee 15: Solid electrical insulating materials. It is an International Standard.

This second edition cancels and replaces the first edition published in 2010. This edition constitutes a technical revision.

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

- a) change in volume resistivity requirement to a maximum;
- b) change in method to measure resistivity.

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

Draft	Report on voting
15/1044/FDIS	15/1059/RVD

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/publications.

A list of all the parts in the IEC 60684 series, under the general title *Flexible insulating sleeving*, 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

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

This document is one of a series of standards which deals with flexible insulating sleeving for electrical purposes.

The series consists of three parts:

IEC 60684-1: Definitions and general requirements

IEC 60684-2: Methods of test

IEC 60684-3: Specifications for individual types of sleeving

This document comprises one of the sheets of IEC 60683-3 as follows:

Sheet 281: Heat-shrinkable, polyolefin sleeving, semiconductive

This sleeving is normally supplied in the colour black.

Materials which conform to this specification meet established levels of performance. However, the selection of a material by a user for a specific application will be based on the actual requirements necessary for adequate performance in that application and not based on this specification alone.

This sleeving is designed to be used in MV cable accessories and as such electrical performance will be proven as part of the assembly. Examples of this are described in HD 629 and IEC 60502 (all parts).

FLEXIBLE INSULATING SLEEVING –

Part 3: Specifications for individual types of sleeving – Sheet 281: Heat-shrinkable, polyolefin sleeving, semiconductive

1 Scope

This part of IEC 60684 gives the requirements for two types of heat-shrinkable, polyolefin sleeving, semiconductive, with a nominal shrink ratio of 3:1.

This sleeving has been found suitable for use up to temperatures of 100 °C.

- Type A: Thin wall Internal diameter up to 195,0 mm typically
- Type B: Medium wall Internal diameter up to 120,0 mm typically

Since these types of sleeveings cover a significantly large range of sizes and wall thicknesses, Annex A provides guidance on the range of sizes available. The actual size will be agreed between the user and the supplier.

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 60296, *Fluids for electrotechnical applications – Mineral insulating oils for electrical equipment*

IEC 60684-1, *Flexible insulating sleeving – Part 1: Definitions and general requirements*

IEC 60684-2:2025, *Flexible insulating sleeving – Part 2: Methods of test*

IEC 60757, *Code for designation of colours*

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