

# INTERNATIONAL STANDARD

# IEC 60684-3-233

Second edition  
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## Flexible insulating sleeving –

### Part 3: Specifications for individual types of sleeving – Sheet 233: Heat-shrinkable fluoroelastomer sleeving, flame retarded, fluid resistant, shrink ratio 2:1

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**FLEXIBLE INSULATING SLEEVING –****Part 3: Specifications for individual types of sleeving –  
Sheet 233: Heat-shrinkable fluoroelastomer sleeving,  
flame retarded, fluid resistant, shrink ratio 2:1**

## FOREWORD

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International Standard IEC 60684-3-233 has been prepared by IEC technical committee 15: Standards on specifications for electrical Insulating materials.

This second edition cancels and replaces the first edition, published in 1998, and constitutes a technical revision.

The main change with regard to the previous edition concerns the replacement of the thermal endurance test, according to IEC 60216, by a long-term ageing test, i.e. 3 000 h, at the maximum recommended temperature for such use, in order to furnish thermal test data within a workable time frame.

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

FDIS	Report on voting
15/231/FDIS	15/249/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 maintenance result 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- withdrawn;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.

A bilingual version of this publication may be issued at a later date.

## INTRODUCTION

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

The series consists of three parts:

Part 1: Definitions and general requirements (IEC 60684-1)

Part 2: Methods of test (IEC 60684-2)

Part 3: Specifications for individual types of sleeving (IEC 60684-3)

This standard gives one of the sheets comprising part 3 as follows:

Sheet 233: Heat-shrinkable fluoroelastomer sleeving, flame retarded, fluid resistant, shrink ratio 2:1.

## FLEXIBLE INSULATING SLEEVING –

### Part 3: Specifications for individual types of sleeving – Sheet 233: Heat-shrinkable fluoroelastomer sleeving, flame retarded, fluid resistant, shrink ratio 2:1

#### 1 Scope

This standard gives the requirements for two types of heat-shrinkable, flame retarded, fluid resistant<sup>1)</sup>, nominal shrink ratio 2:1, fluoroelastomer sleeving for use at temperatures up to 200 °C:

- Type A: thick wall;
- Type B: thin wall.

These sleeveings are normally supplied with internal diameters up to 51 mm, and the standard colour is black.

Sizes or colours other than those specifically listed in this standard may be available as custom items. These items shall be considered to comply with this standard if they comply with the property requirements listed in Tables 3, 4, 5 and 6 except for dimensions and mass

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

#### 2 Normative references

The following referenced documents are indispensable for the application 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 60684-1:2003, *Flexible insulating sleeving – Part 1: Definitions and general requirements*

IEC 60684-2.1:1997, *Flexible insulating sleeving – Part 2: Methods of test*

Amendment (2003)

IEC 60757:1983, *Code for designation of colours*

ISO 846:1997, *Plastics – Evaluation of the action of micr-organisms*

ISO 1817:1999, *Rubber, vulcanized – Determination of the effect of liquids*

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<sup>1)</sup> Except to phosphate ester-based hydraulic fluids.