

**Gibke izolacijske cevi - 3. del: Specifikacije za posamezne tipe cevi - 229. list:  
Toplotno skrčljive polgibke poliviniliden-fluoridne cevi, ognjevarne, odporne  
proti tekočinam, razmerje krčenja 2:1 (IEC 60684-3-229:2003)**

Flexible insulating sleeving - Part 3: Specifications for individual types of sleeving -  
Sheet 229: Heat- shrinkable semi-flexible polyvinylidene fluoride sleeving, flame  
retarded, fluid resistant, shrink ratio 2:1 (IEC 60684-3-229:2003)

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English version

**Flexible insulating sleeving**  
**Part 3 : Specifications for individual types of sleeving**  
**Sheet 229: Heat-shrinkable semi-flexible, polyvinylidene fluoride sleeving,**  
**flame retarded, fluid resistant, shrink ratio 2:1**  
**(IEC 60684-3-229:2003)**

Gaines isolantes souples

Partie 3: Spécifications pour types particuliers de gaines

Feuille 229: Gaines thermorétractables semi-souples en fluorure de polyvinylidène, retardées à la flamme, résistant aux fluides, rapport de rétreint 2:1  
(CEI 60684-3-229:2003)

Isolierschläuche

Teil 3: Anforderungen für einzelne Schlauchtypen

Blatt 229: Wärmeschrumpfende Polyvinylidenefluoridschläuche, gering flexibel, flammwidrig, flüssigkeitsbeständig, Schrumpfverhältnis 2:1  
(IEC 60684-3-229:2003)

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This European Standard was approved by CENELEC on 2003-04-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

## CENELEC

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 15C/1414/FDIS, future edition 1 of IEC 60684-3-229, prepared by SC 15C, Specifications, of IEC TC 15, Insulating materials, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60684-3-229 on 2003-04-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-04-01

Annexes designated "normative" are part of the body of the standard.  
In this standard, annex ZA is normative.  
Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60684-3-229:2003 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60684-1	1980	Specification for flexible insulating sleeving Part 1: Definitions and general requirements	EN 60684-1	1995
IEC 60684-2	1997	Flexible insulating sleeving Part 2: Methods of test	EN 60684-2	1997
IEC 60757	1983	Code for designation of colours	HD 457 S1	1985
ISO 1817	1999	Rubber, vulcanized - Determination of the effect of liquids	-	-

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Première édition  
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2003-02

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**Gaines isolantes souples –**

**Partie 3:**

**Spécifications pour types particuliers de gaines –  
Feuille 229: Gaines thermorétractables**

**semi-souples en fluorure de polyvinylidène,  
retardées à la flamme, résistant aux fluides,  
rapport de rétreint 2:1**

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**Flexible insulating sleeving –**

**Part 3:**

**Specifications for individual types of sleeving –  
Sheet 229: Heat-shrinkable semi-flexible,  
polyvinylidene fluoride sleeving, flame retarded,  
fluid resistant, shrink ratio 2:1**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FLEXIBLE INSULATING SLEEVING –

**Part 3: Specifications for individual types of sleeving –  
Sheet 229: Heat-shrinkable semi-flexible, polyvinylidene fluoride sleeving,  
flame retarded, fluid resistant, shrink ratio 2:1**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60684-3-229 has been prepared by subcommittee 15C: Specifications, of IEC technical committee 15: Insulating materials.

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

FDIS	Report on voting
15C/1414/FDIS	15C/1456/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 2005. At this date, the publication will be

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