
**Gibke izolacijske cevi – 3. del: Specifikacija za posamezne vrste cevi – 228.
list: Toplotno skrčljive poltoge poliviniliden-fluoridne cevi, ognjevarne,
odporne proti tekočinam, razmerje krčenja 2:1 (IEC 60684-3-228:1998)**

(istoveten EN 60684-3-228:2004)

Flexible insulating sleeving - Part 3: Specifications for individual types of sleeving -
Sheet 228: Heat- shrinkable, semi-rigid polyvinylidene fluoride sleeving, flame
retarded, fluid resistant, shrink ratio 2:1 (IEC 60684-3-228:1998)

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English version

Flexible insulating sleeving
Part 3: Specifications for individual types of sleeving
Sheet 228: Heat-shrinkable, semi-rigid polyvinylidene fluoride sleeving,
flame retarded, fluid resistant, shrink ratio 2:1
(IEC 60684-3-228:2004)

Gaines isolantes souples

Partie 3: Spécifications pour types particuliers de gaines

Feuille 228: Gaines thermorétractables semi-rigides en fluorure de polyvinylidène, retardées à la flamme, résistant aux fluides, rapport de rétreint 2:1 (CEI 60684-3-228:2004)

Isolierschläuche

Teil 3: Anforderungen für einzelne Schlauchtypen

Blatt 228: Wärmeschrumpfende Polyvinylidenefluoridschläuche, halbsteif, flammwidrig, flüssigkeitsbeständig, Schrumpfverhältnis 2:1 (IEC 60684-3-228:2004)

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This European Standard was approved by CENELEC on 2004-07-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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/1599/FDIS, future edition 2 of IEC 60684-3-228, 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 60684-3-228 on 2004-07-01.

This European Standard supersedes EN 60684-3-228:1998.

The significant technical change with regard to EN 60684-2-228:1998 is:

- Replacement of the thermal endurance test method according to EN 60216 with a long term ageing test, i.e. 3 000 h at the recommended maximum temperature found suitable for use, in order to provide safe thermal test data within a workable time scale.

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) 2005-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-07-01

Annex ZA has been added by CENELEC.

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Endorsement notice

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The text of the International Standard IEC 60684-3-228:2004 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 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.

NOTE Where 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	2003	Flexible insulating sleeving Part 1: Definitions and general requirements	EN 60684-1	2003
IEC 60684-2 A1	1997 2003	Part 2: Methods of test	EN 60684-2 A1	1997 2003
IEC 60757	1983	Code for designation of colours	HD 457 S1	1985
ISO 846	1997	Plastics - Evaluation of the action of micro-organisms	EN ISO 846	1997
ISO 1817	1999	Rubber, vulcanized - Determination of the effect of liquids	-	-

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

60684-3-228

Deuxième édition
Second edition
2004-05

Gaines isolantes souples –

Partie 3:

**Spécifications pour types particuliers de gaines –
Feuille 228: Gaines thermorétractables semi-
rigides 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 228: Heat-shrinkable, semi-rigid
polyvinylidene fluoride sleeving,
flame retarded, fluid resistant, shrink ratio 2:1**

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FLEXIBLE INSULATING SLEEVING –

**Part 3: Specifications for individual types of sleeving –
Sheet 228: Heat-shrinkable, semi-rigid polyvinylidene fluoride sleeving,
flame retarded, fluid resistant, shrink ratio 2:1**

FOREWORD

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International Standard IEC 60684-3-228 has been prepared by subcommittee 15C: Specifications, of IEC technical committee 15: Insulating materials.

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

This edition includes the following significant technical change with regard to the previous edition:

Replacement of the thermal endurance test method according to IEC 60216 with a long term ageing test, i.e. 3 000 h at the recommended maximum temperature found suitable for use, in order to provide safe thermal test data within a workable time scale.

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

FDIS	Report on voting
15C/1599/FDIS	15C/1614/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 2009. At this date, the publication will be

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

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