

# INTERNATIONAL STANDARD



**Flexible insulating sleeving –  
Part 3: Specifications for individual types of sleeving – Sheets 116 and 117:  
Extruded polychloroprene, general purpose**

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IEC Secretariat  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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IEC 60684-3-116

Edition 4.0 2024-03  
REDLINE VERSION

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**Flexible insulating sleeving –  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

ICS 29.035.20

ISBN 978-2-8322-8673-9

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### FLEXIBLE INSULATING SLEEVING –

### Part 3: Specifications for individual types of sleeving – Sheets 116 and 117: Extruded polychloroprene, general purpose

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**This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60684-3-116:2010. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.**

IEC 60684-3-116 has been prepared by IEC technical committee 15: Solid electrical insulating materials. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2010 and constitutes a technical revision.

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

- a) update of clause references in Table 2;
- b) addition of resistance to fluids test.

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

Draft	Report on voting
15/1005/CDV	15/1020/RVC

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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## 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:

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

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

Part 3: Specification requirements for individual types of sleeving (IEC 60684-3).

This document comprises two of the sheets of Part 3, as follows:

Sheet 116: Extruded polychloroprene, general purpose: thin wall;

Sheet 117: Extruded polychloroprene, general purpose: thick wall.

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## FLEXIBLE INSULATING SLEEVING –

### Part 3: Specifications for individual types of sleeving – Sheets 116 and 117: Extruded polychloroprene, general purpose

#### 1 Scope

This part of IEC 60684 gives the requirements for non-heat-shrinkable sleeving, extruded from compounds based on polychloroprene elastomer. This sleeving has been found suitable for temperatures up to 95 °C.

Sleeving of this type is normally available with internal diameters up to 25 mm, and in the following opaque colours: black, brown, red, orange, yellow, green, blue, violet, grey, white and pink. Sizes or colours other than those specifically listed in this document ~~may~~ can possibly be available as custom items. These items ~~shall be~~ are considered to comply with this document if they comply with the other property requirements listed in Table 2.

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~~ will be based on the actual requirements necessary for adequate performance in the application and not based on the specification alone.

#### 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 60684-1:~~2003~~, *Flexible insulating sleeving – Part 1: Definitions and general requirements*

~~IEC 60684-2:—, Flexible insulating sleeving – Part 2: Methods of test<sup>1</sup>~~

IEC 60684-2:~~1997~~2011, *Flexible insulating sleeving – Part 2: Methods of test*  
~~Amendment 1 (2003)~~  
~~Amendment 2 (2005)~~

IEC 60068-2-74<sup>2</sup>:1999, *Environmental testing – Part 2-74: Tests – Test Xc: Fluid contamination*  
IEC 60068-2-74:1999/AMD1:2018

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

ISO 1817, *Rubber, vulcanized or thermoplastic – Determination of the effect of liquids*

<sup>1</sup> ~~Third edition to be published~~

<sup>2</sup> There exists a consolidated version 1.1:2018 that includes IEC 60068-2-74:1999 and its Amendment 1:2018.

### 3 Terms and definitions

There are no terms and definitions in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 4 Designation

The sleeving shall be identified by the following designation:

Description	IEC publication number	IEC Part number	IEC Sheet number	Size internal diameter, in millimetres	Colour
↓	↓	↓	↓	↓	↓
Sleeving	IEC 60684	3	116	2,5	GN

Any abbreviation for colour shall comply with IEC 60757 where applicable. Non-standard colours shall be written out in full.

### 5 Requirements

In addition to the general requirements given in IEC 60684-1, the sleeving shall comply with the requirements of Table 1 and Table 2, Table 3 and Table 4.

### 6 Sleeving conformance

Product qualification shall normally be based on results from 10 mm internal diameter sleeving. Colour and colour fastness to light shall be qualified for all colours.

**Table 1 – Dimensional requirements<sup>a</sup>**

Internal diameter <sup>b</sup> mm			Wall thickness mm			
Nominal			Sheet 116: Thin wall		Sheet 117: Thick wall	
	Min.	Max.	Min.	Max.	Min.	Max.
0,5	0,4	0,7	0,4	0,6	0,6	0,8
0,8	0,6	0,9	0,4	0,6	0,6	0,8
1,0	0,9	1,2	0,4	0,6	0,6	0,8
1,2	1,0	1,4	0,4	0,6	0,6	0,8
1,5	1,3	1,8	0,5	0,7	0,7	0,9
2,0	1,7	2,3	0,5	0,7	0,7	0,9
2,5	2,1	2,9	0,5	0,7	0,7	0,9
3,0	2,5	3,5	0,5	0,7	0,7	0,9
4,0	3,3	4,6	0,5	0,9	0,9	1,2
5,0	4,2	5,8	0,5	0,9	0,9	1,2
8,0	6,8	9,2	0,5	1,1	1,1	1,5
10,0	8,6	11,4	0,5	1,2	1,2	1,8
12,0	10,4	13,6	0,5	1,2	1,2	1,8
16,0	14,0	18,0	0,5	1,4	1,4	2,0
20,0	17,5	22,5	0,7	1,5	1,5	2,4
25,0	21,5	28,5	0,7	1,5	1,5	2,4

<sup>a</sup> Measurements shall be made to the nearest 0,05 mm.

<sup>b</sup> Sleeving with a non-standard nominal internal diameter shall have a wall thickness at least as large as the next larger standard size. Sleeving with a non-standard internal diameter greater than 25,0 mm shall have a wall thickness that meets the requirements of the 25,0 mm internal diameter sleeving.

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Table 2 – Property requirements

Property	IEC 60684-2:2011, clause or subclause	Units	Max. or min.	Requirements	Remarks
Dimensions	3	mm		Table 1	
Bending after heating	13	–	–	There shall be no sign of cracking and the original colour shall be clearly recognizable.	Oven temperature $95\text{ °C} \pm 2\text{ K}$ . For nominal internal diameters of 8 mm or less, the mandrel diameters shall be between four and five times the nominal internal diameter of the sleeving. Above 8 mm nominal internal diameter, strips 6 mm wide cut from the sleeving shall be bent around a mandrel $6\text{ mm} \pm 1\text{ mm}$ in diameter.
Bending at low temperature	14	–	–	There shall be no sign of cracking.	Test temperature $-35\text{ °C} \pm 2\text{ K}$ Sleeving shall be tested unfilled and the mandrel diameter shall be between 15 and 20 times the specified maximum wall thickness. For strips cut from sleeving the mandrel diameter shall be between eight and ten times the specified maximum wall thickness.
Elongation at break	19.12 and 19.3	%	Min.	400	Dumbbell specimens shall be cut from sleeving of 8 mm or greater diameter.
Breakdown voltage	21	kV	Min.	Sheet 116: 2,0 Sheet 117: 4,0	The voltage shall be applied at a rate of 500 V/s or such that the required breakdown value is reached between 10 s and 20 s.
Volume resistivity – at room temperature – after damp heat	23 23.4.2 23.4.4	$\Omega\cdot\text{m}$	Min.	$5 \times 10^9$ $4 \times 10^8$	
Flame propagation	26 Method A	s	Max.	30	In addition, the indicator flag shall not be burned, nor shall flaming or glowing particles or drops ignite the cotton in any of the three tests.
Silver staining	30	–	–	Any stain shall not be darker than the standard shade.	
Colour fastness	34	–	–	The colour contrast between the exposed parts of the specimens shall be equal to or less than that of the fastness standard.	Light fastness standard 3 shall be used.
Ozone resistance	35	–	–	There shall be no sign of cracking.	The ozone concentration shall be $(1 \pm 0,2)\text{ ml/m}^3$ and the temperature shall be $30\text{ °C}$ to $40\text{ °C}$ . The mandrel shall be twice the nominal diameter of the sleeving. The duration of the exposure shall be $(20 \pm 0,5)\text{ h}$ .
Tension test	48	%	Max.	25	<del>The test shall be carried out at a temperature of <math>23\text{ °C} \pm 2\text{ K}</math>.</del>
Tear propagation	5049.3 <sup>3</sup>	–	–	There shall be no splitting.	Oven temperature $95\text{ °C} \pm 2\text{ K}$ . <del>The mandrel diameter shall be <math>3D</math>, where <math>D</math> is the nominal bore of the sleeves.</del> Test time: 6 h

<sup>3</sup>—This subclause refers to the 3<sup>rd</sup> edition of IEC 60684-2, which is to be published.

Property	IEC 60684-2:2011, clause or subclause	Units	Max. or min.	Requirements	Remarks
					<b>NOTE</b> —Test not applicable to sleeves with less than 2 mm internal diameter.
Circumferential extension	<del>59</del> <sup>4</sup> 58	–	–	There shall be no splitting	Oven temperature 70 °C ± 2 K. The mandrel diameter shall be 3,5D, where D is the nominal bore of the sleeves. <b>NOTE</b> —Test not applicable to sleeves with less than 2 mm internal diameter.
Voltage proof	<del>60</del> <sup>5</sup> 59	kV	Min.	There shall be no breakdown.	Applied test voltage: up to and including 0,5 mm wall shall be 2 kV, over 0,5 mm wall shall be 4 kV.
Thermal shock	<del>61.4.1</del> <sup>6</sup> 60	–	–	The sleeves shall show no signs of cracking, splitting or change of colour. The sleeves shall not slip off the mandrel under their own weight. Any printing shall remain legible.	Oven temperature 95 °C ± 2 K
Resistance to selected fluids	36			Sleeves shall not slip down the mandrel under their own weight and shall not split or become gelatinous or tacky either on removal from the fluid or after conditioning.	Three test pieces shall be fitted to a smooth non-ferrous mandrel, the diameter of which is twice the nominal internal diameter of the sleeve. Use the fluids and test temperatures specified in Table 3. Use the sample length listed in Table 4. Immersion time: (24 ± 1) h Dry time: 2 hours at 70 °C ± 2 K

<sup>4</sup>—This subclause refers to the 3<sup>rd</sup>-edition of IEC 60684-2, which is to be published.

<sup>5</sup>—This subclause refers to the 3<sup>rd</sup>-edition of IEC 60684-2, which is to be published.

<sup>6</sup>—This subclause refers to the 3<sup>rd</sup>-edition of IEC 60684-2, which is to be published.

**Table 3 – Resistance to selected fluids**

Fluids	Type	Standard or symbol	Immersion temperature °C ± 2 K
IEC 60068-2-74:1999/AMD1:2018 Fluid (b)	Gasoline (piston engine)	ISO 1817 Test Liquid B	40
IEC 60068-2-74:1999/AMD1:2018 Fluid (h)	Cleaning Fluid	Propan-2-ol CAS 67-63-0	50
IEC 60068-2-74:1999/AMD1:2018 Fluid (l)	De-icing Fluid	Ethylene Glycol CAS 107-21-1 with a volume fraction of 50 % in water	23
IEC 60068-2-74:1999/AMD1:2018 Fluid (c)	Mineral based Hydraulic Fluid	NATO H-520 (ON-18) (or as an alternative NATO H-515)	70
IEC 60068-2-74:1999/AMD1:2018 Fluid (e)	Silicone based Hydraulic Fluid	NATO S-1714 (ZX-42)	80

**Table 4 – Sample dimensions for resistance to fluids test**

Nominal internal diameter mm	Length of sleeve mm
0,5 to 1,5	4 ± 1
1,6 to 9,0	7 ± 2
10,0 to 25	12 ± 3

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## Bibliography

IEC 60684-3 (all parts), *Flexible insulating sleeving – Part 3: Specifications for individual types of sleeving*

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**Flexible insulating sleeving –  
Part 3: Specifications for individual types of sleeving – Sheets 116 and 117:  
Extruded polychloroprene, general purpose**

**Gaines isolantes souples –  
Partie 3: Spécifications pour types particuliers de gaines – Feuilles 116 et 117:  
Polychloroprène extrudé, utilisation générale**

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## FLEXIBLE INSULATING SLEEVING –

**Part 3: Specifications for individual types of sleeving –  
Sheets 116 and 117: Extruded polychloroprene, general purpose**

## FOREWORD

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

- a) update of clause references in Table 2;
- b) addition of resistance to fluids test.

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

Draft	Report on voting
15/1005/CDV	15/1020/RVC

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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## 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:

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

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

Part 3: Specification requirements for individual types of sleeving (IEC 60684-3).

This document comprises two of the sheets of Part 3, as follows:

Sheet 116: Extruded polychloroprene, general purpose: thin wall;

Sheet 117: Extruded polychloroprene, general purpose: thick wall.

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## FLEXIBLE INSULATING SLEEVING –

### Part 3: Specifications for individual types of sleeving – Sheets 116 and 117: Extruded polychloroprene, general purpose

#### 1 Scope

This part of IEC 60684 gives the requirements for non-heat-shrinkable sleeving, extruded from compounds based on polychloroprene elastomer. This sleeving has been found suitable for temperatures up to 95 °C.

Sleeving of this type is normally available with internal diameters up to 25 mm, and in the following opaque colours: black, brown, red, orange, yellow, green, blue, violet, grey, white and pink. Sizes or colours other than those specifically listed in this document can possibly be available as custom items. These items are considered to comply with this document if they comply with the other property requirements listed in Table 2.

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IEC 60684-2:2011, *Flexible insulating sleeving – Part 2: Methods of test*

IEC 60068-2-74<sup>1</sup>:1999, *Environmental testing – Part 2-74: Tests – Test Xc: Fluid contamination*  
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<sup>1</sup> There exists a consolidated version 1.1:2018 that includes IEC 60068-2-74:1999 and its Amendment 1:2018.

### 3 Terms and definitions

There are no terms and definitions in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 4 Designation

The sleeving shall be identified by the following designation:

Description	IEC publication number	IEC Part number	IEC Sheet number	Size internal diameter, in millimetres	Colour
↓	↓	↓	↓	↓	↓
Sleeving	IEC 60684	3	116	2,5	GN

Any abbreviation for colour shall comply with IEC 60757 where applicable. Non-standard colours shall be written out in full.

### 5 Requirements

In addition to the general requirements given in IEC 60684-1, the sleeving shall comply with the requirements of Table 1 and Table 2, Table 3 and Table 4.

### 6 Sleeving conformance

Product qualification shall normally be based on results from 10 mm internal diameter sleeving. Colour and colour fastness to light shall be qualified for all colours.

**Table 1 – Dimensional requirements<sup>a</sup>**

Internal diameter <sup>b</sup> mm			Wall thickness mm			
Nominal			Sheet 116: Thin wall		Sheet 117: Thick wall	
	Min.	Max.	Min.	Max.	Min.	Max.
0,5	0,4	0,7	0,4	0,6	0,6	0,8
0,8	0,6	0,9	0,4	0,6	0,6	0,8
1,0	0,9	1,2	0,4	0,6	0,6	0,8
1,2	1,0	1,4	0,4	0,6	0,6	0,8
1,5	1,3	1,8	0,5	0,7	0,7	0,9
2,0	1,7	2,3	0,5	0,7	0,7	0,9
2,5	2,1	2,9	0,5	0,7	0,7	0,9
3,0	2,5	3,5	0,5	0,7	0,7	0,9
4,0	3,3	4,6	0,5	0,9	0,9	1,2
5,0	4,2	5,8	0,5	0,9	0,9	1,2
8,0	6,8	9,2	0,5	1,1	1,1	1,5
10,0	8,6	11,4	0,5	1,2	1,2	1,8
12,0	10,4	13,6	0,5	1,2	1,2	1,8
16,0	14,0	18,0	0,5	1,4	1,4	2,0
20,0	17,5	22,5	0,7	1,5	1,5	2,4
25,0	21,5	28,5	0,7	1,5	1,5	2,4

<sup>a</sup> Measurements shall be made to the nearest 0,05 mm.

<sup>b</sup> Sleeving with a non-standard nominal internal diameter shall have a wall thickness at least as large as the next larger standard size. Sleeving with a non-standard internal diameter greater than 25,0 mm shall have a wall thickness that meets the requirements of the 25,0 mm internal diameter sleeving.

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Table 2 – Property requirements

Property	IEC 60684-2:2011, clause or subclause	Units	Max. or min.	Requirements	Remarks
Dimensions	3	mm		Table 1	
Bending after heating	13	–	–	There shall be no sign of cracking and the original colour shall be clearly recognizable.	Oven temperature $95\text{ °C} \pm 2\text{ K}$ . For nominal internal diameters of 8 mm or less, the mandrel diameters shall be between four and five times the nominal internal diameter of the sleeving. Above 8 mm nominal internal diameter, strips 6 mm wide cut from the sleeving shall be bent around a mandrel $6\text{ mm} \pm 1\text{ mm}$ in diameter.
Bending at low temperature	14	–	–	There shall be no sign of cracking.	Test temperature $-35\text{ °C} \pm 2\text{ K}$ Sleeving shall be tested unfilled and the mandrel diameter shall be between 15 and 20 times the specified maximum wall thickness. For strips cut from sleeving the mandrel diameter shall be between eight and ten times the specified maximum wall thickness.
Elongation at break	19.2 and 19.3	%	Min.	400	Dumbbell specimens shall be cut from sleeving of 8 mm or greater diameter.
Breakdown voltage	21	kV	Min.	Sheet 116: 2,0 Sheet 117: 4,0	The voltage shall be applied at a rate of 500 V/s or such that the required breakdown value is reached between 10 s and 20 s.
Volume resistivity – at room temperature – after damp heat	23 23.4.2 23.4.4	$\Omega\cdot\text{m}$	Min.	$5 \times 10^9$ $4 \times 10^8$	
Flame propagation	26 Method A	s	Max.	30	In addition, the indicator flag shall not be burned, nor shall flaming or glowing particles or drops ignite the cotton in any of the three tests.
Silver staining	30	–	–	Any stain shall not be darker than the standard shade.	
Colour fastness	34	–	–	The colour contrast between the exposed parts of the specimens shall be equal to or less than that of the fastness standard.	Light fastness standard 3 shall be used.
Ozone resistance	35	–	–	There shall be no sign of cracking.	The ozone concentration shall be $(1 \pm 0,2)\text{ ml/m}^3$ and the temperature shall be $30\text{ °C}$ to $40\text{ °C}$ . The mandrel shall be twice the nominal diameter of the sleeving. The duration of the exposure shall be $(20 \pm 0,5)\text{ h}$ .
Tension test	48	%	Max.	25	
Tear propagation	49.3	–	–	There shall be no splitting.	Oven temperature $95\text{ °C} \pm 2\text{ K}$ . Test time: 6 h Test not applicable to sleeves with less than 2 mm internal diameter.

Property	IEC 60684-2:2011, clause or subclause	Units	Max. or min.	Requirements	Remarks
Circumferential extension	58	–	–	There shall be no splitting	Oven temperature 70 °C ± 2 K. The mandrel diameter shall be 3,5D, where D is the nominal bore of the sleeves. Test not applicable to sleeves with less than 2 mm internal diameter.
Voltage proof	59	kV	Min.	There shall be no breakdown.	Applied test voltage: up to and including 0,5 mm wall shall be 2 kV, over 0,5 mm wall shall be 4 kV.
Thermal shock	60	–	–	The sleeves shall show no signs of cracking, splitting or change of colour. The sleeves shall not slip off the mandrel under their own weight. Any printing shall remain legible.	Oven temperature 95 °C ± 2 K
Resistance to selected fluids	36			Sleeves shall not slip down the mandrel under their own weight and shall not split or become gelatinous or tacky either on removal from the fluid or after conditioning.	Three test pieces shall be fitted to a smooth non-ferrous mandrel, the diameter of which is twice the nominal internal diameter of the sleeve. Use the fluids and test temperatures specified in Table 3. Use the sample length listed in Table 4. Immersion time: (24 ± 1) h Dry time: 2 hours at 70 °C ± 2 K

**Table 3 – Resistance to selected fluids**

Fluids	Type	Standard or symbol	Immersion temperature °C ± 2 K
IEC 60068-2-74:1999/AMD1:2018 Fluid (b)	Gasoline (piston engine)	ISO 1817 Test Liquid B	40
IEC 60068-2-74:1999/AMD1:2018 Fluid (h)	Cleaning Fluid	Propan-2-ol CAS 67-63-0	50
IEC 60068-2-74:1999/AMD1:2018 Fluid (l)	De-icing Fluid	Ethylene Glycol CAS 107-21-1 with a volume fraction of 50 % in water	23
IEC 60068-2-74:1999/AMD1:2018 Fluid (c)	Mineral based Hydraulic Fluid	NATO H-520 (ON-18) (or as an alternative NATO H-515)	70
IEC 60068-2-74:1999/AMD1:2018 Fluid (e)	Silicone based Hydraulic Fluid	NATO S-1714 (ZX-42)	80

**Table 4 – Sample dimensions for resistance to fluids test**

Nominal internal diameter mm	Length of sleeve mm
0,5 to 1,5	4 ± 1
1,6 to 9,0	7 ± 2
10,0 to 25	12 ± 3

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## Bibliography

IEC 60684-3 (all parts), *Flexible insulating sleeving – Part 3: Specifications for individual types of sleeving*

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## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

## GAINES ISOLANTES SOUPLES –

**Partie 3: Spécifications pour types particuliers de gaines –  
Feuilles 116 et 117: Polychloroprène extrudé, utilisation générale**

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Cette quatrième édition annule et remplace la troisième édition parue en 2010, dont elle constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) mise à jour des références aux articles dans le Tableau 2;
- b) ajout de l'essai de résistance aux fluides.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
15/1005/CDV	15/1020/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

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## INTRODUCTION

Le présent document fait partie d'une série de normes qui traitent des gaines isolantes souples à usages électriques.

Cette série est composée de trois parties:

Partie 1: Définitions et exigences générales (IEC 60684-1);

Partie 2: Méthodes d'essai (IEC 60684-2);

Partie 3: Spécifications pour types particuliers de gaines (IEC 60684-3).

Le présent document comprend deux des feuilles qui composent la Partie 3, à savoir:

Feuille 116: Polychloroprène extrudé, utilisation générale: paroi mince;

Feuille 117: Polychloroprène extrudé, utilisation générale: paroi épaisse.

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## GAINES ISOLANTES SOUPLES –

### Partie 3: Spécifications pour types particuliers de gaines – Feuilles 116 et 117: Polychloroprène extrudé, utilisation générale

#### 1 Domaine d'application

La présente partie de l'IEC 60684 fournit les exigences relatives aux gaines non thermorétractables, extrudées à partir de composés à base d'élastomère polychloroprène. Ces gaines se sont révélées être adaptées à des températures jusqu'à 95 °C.

Les gaines de ce type sont généralement proposées avec des diamètres intérieurs jusqu'à 25 mm et dans les couleurs opaques suivantes: noir, brun, rouge, orange, jaune, vert, bleu, violet, gris, blanc et rose. D'autres dimensions et d'autres couleurs que celles spécifiquement indiquées dans le présent document peuvent être proposées comme articles spéciaux. Ces articles sont considérés comme conformes au présent document s'ils sont conformes aux autres exigences relatives aux propriétés indiquées dans le Tableau 2.

Les matériaux conformes à la présente spécification satisfont à des niveaux établis de performance. Toutefois, l'utilisateur choisit le matériau destiné à une application spécifique en se fondant sur les exigences réelles nécessaires pour assurer des performances adéquates dans le cadre de l'application considérée et non sur la spécification seule.

#### 2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60684-1, *Gaines isolantes souples – Partie 1: Définitions et exigences générales*

IEC 60684-2:2011, *Gaines isolantes souples – Partie 2: Méthodes d'essai*

IEC 60068-2-74<sup>1</sup>:1999, *Essais d'environnement – Partie 2-74: Essais – Essai Xc: Contamination par des fluides*

IEC 60068-2-74:1999/AMD1:2018

IEC 60757:1983, *Code de désignation de couleurs*

ISO 1817, *Caoutchouc vulcanisé ou thermoplastique – Détermination de l'action des liquides*

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<sup>1</sup> Il existe une version consolidée 1.1:2018 qui inclut l'IEC 60068-2-74:1999 et son Amendement 1:2018.