

ICS 29.035.20

CCS K 15



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 42735-2023

Heat-shrinkable polyolefin sleeving-stress control

Issued on: May 23, 2023

Implemented on: December 1, 2023

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

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foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents"

drafting:

This document is modified to adopt IEC 60684-3-282:2010 "Insulated hoses Part 3: Specifications for various types of hoses Part 282: should

Force Control Polyolefin Heat Shrink Tubing:

Compared with IEC 60684-3-282:2010, this document has made the following structural adjustments:

--- The chapter "Terms and Definitions" has been added;

---Chapter 5 corresponds to Chapter 1, Chapter 5 and Table 1 and Table 2 of IEC 60684-3-282:2010, of which 5:1 corresponds

The third paragraph to the sixth paragraph of Chapter 1 of IEC 60684-3-282:2010, 5:2 corresponds to Chapter 5 of IEC 60684-3-282:2010;

---Chapter 6 corresponds to the test method in column 2 and the remarks in column 6 in Table 1 of IEC 60684-3-282:2010;

--- The third paragraph of 7:4 corresponds to Chapter 6 of IEC 60684-3-282:2010:

The technical differences between this document and IEC 60684-3-282:2010 and their reasons are as follows:

--- Deleted the seventh paragraph of Chapter 1 of IEC 60684-3-282:2010 to meet my country's national conditions and facilitate application;

--- Deleted the normative references "IEC 60502 (all parts)", "IEC 60757:1983" and "HD629" to comply with our country

situation, easy to apply;

--- Deleted Chapter 3 "Naming" of IEC 60684-3-282:2010 to meet my country's national conditions and facilitate application;

--- Deleted Table 1 "Storage Dimensional Stability" of IEC 60684-3-282:2010 to meet my country's national conditions and facilitate application;

--- Added the normative reference "GB/T 2828:1-2012" (see 7:3) to meet the technical conditions of our country and facilitate the application;

--- Replaced IEC 60684-2:1997 with the normatively referenced GB/T 7113:2-2014, the degree of consistency between the two documents

To modify (see Chapter 6) to meet the technical conditions of our country and facilitate application;

--- Changed the "dielectric constant" and changed 5 to 15 (see Table 1) to meet the technical conditions of our country and facilitate application;

--- Changed the "length change" and changed "-10" to the minimum value (see Table 1) to meet the technical conditions of our country and facilitate application;

--- Increased "dielectric loss factor" and its "test method" (see Table 1 and 6:9) to control heat generation, in line with my country's technical conditions;

--- Added the test temperature tolerance of "low temperature bendability" and the immersion time and completion time of "fluid resistance" (see 6:4 and

6:7), in order to conform to my country's national conditions and facilitate application;

--- The chapter "Inspection Rules" (see Chapter 7) has been added to meet the technical conditions of our country and facilitate application;

--- The chapter "Signs, packaging, transportation and storage" (see Chapter 8) has been added to meet the technical conditions of our country and facilitate application;

--- Changed the "wall thickness" in the "Appendix" to "minimum value after shrinkage" (see Table A:1 and Table A:2) to meet the technical conditions of our country and facilitate

application:

The following editorial changes have been made to this document:

--- In order to coordinate with existing standards, change the name of the standard to "stress-controlled polyolefin heat-shrinkable tube";

--- The unit "K" is replaced by the unit " degrees C":

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

1 Scope

This document specifies the technical requirements, test methods, inspection rules and marking, packaging, transportation and

storage:

This document applies to stress-controlled polyolefin heat-shrinkable tubing with a nominal shrinkage ratio of 3:1 and a maximum service temperature of 100°C:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document:

GB 2536-2011 Unused mineral insulating oils for electrical fluid transformers and switches (IEC 60296:2003, MOD)

Note: There is no technical difference between the referenced content of GB 2536-2011 and the referenced content of IEC 60296:2003:

GB/T 2828.1-2012 Counting sampling inspection procedure Part 1: Batch-by-batch inspection sampling retrieved by acceptance quality limit (AQL)

Plan (ISO 2859-1:1999, IDT)

GB/T 7113.1-2014 Insulating hoses - Part 1: Definitions and general requirements (IEC 60684-1:2003, MOD)

Note: There is no technical difference between the referenced content of GB/T 7113.1-2014 and the referenced content of IEC 60684-1:2003:

GB/T 7113:2-2014 Insulating hoses - Part 2: Test methods (IEC 60684-2:2003, MOD)

3 Terms and Definitions

This document does not have terms and definitions that need to be defined:

4 Test conditions

Unless otherwise specified, stress-controlled polyolefin heat-shrinkable tubing should be shrunk at: $200^{\circ}\text{C} \pm 3^{\circ}\text{C}$ in a forced-air circulation oven:

Test after 10min $\pm$ 1min:

5 Technical Requirements

5:1 General requirements

Stress control polyolefin heat shrink tubing is divided into two types: type A (medium wall) and type B (thick wall), and the inner diameter of type A (medium wall) usually does not exceed

65:0mm, the inner diameter of type B (thick wall) usually does not exceed 95:0mm, the color is generally black, see Appendix A for the inner diameter and wall thickness, and can also be obtained from the supplier:

It needs to be negotiated and determined by both parties: In special applications, the selection of materials should not only meet the requirements of this document, but also meet the performance requirements in the application:

Require:

5:2 General and performance requirements

In addition to the general requirements specified in GB/T 7113:1-2014, the stress-controlled polyolefin heat-shrinkable tube should also meet the requirements listed in Table 1,

Table 2 requirements: