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

GB 3048.10-1982

Replacing GB/T 3048.10-1994

**Test methods for electrical properties of electric cables and
wires -- Part 10: Spark test of extruded protective sheaths
(English Translation)**

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Foreword

GB/T 3048 "wire and cable electrical performance test method" is divided into 14 parts.

- Part 1. General;
- Part 2. Resistivity test of metallic materials;
- Part 3. semi-conductive rubber material volume resistivity test;
- Part 4. DC resistance test conductor;
- Part 5. Insulation resistance test;
- Part 7. Resistance to tracking test;
- Part 8. AC voltage test;
- Part 9. Insulated wire core spark test;
- Part 10. Extrusion sheath spark test;
- Part 11. Dielectric loss tangent test;
- Part 12. Partial discharge test;
- Part 13. Impulse voltage test;
- Part 14. DC voltage test;
- Part 16. Surface resistance test.

This section GB/T 3048 Part 10.

This Part replaces GB/T 3048.10-1994 "Electrical properties of wires and cables - Extrusion corrosion protection sheath spark test." This repair in accordance with GB/T 1.1-2000 "Standardization Guide Part 1. Standard Structure and Writing Rules" This section has been adjusted.

This section compared with GB/T 3048.10-1994 main changes are as follows.

--- Standard English name changed to

"Test methods for electrical properties of electric cables and wires - Part 10.

Spark test of extruded protective sheaths";

--- The overall structure and layout of this section has been modified according to GB/T 1.1-2000.

- 1) Chapter 1 is "Scope" (Chapter 1 of the 1994 edition; Chapter 1 of this edition);
- 2) Chapter 2 is "Normative references" (Chapter 2 of the 1994 edition; Chapter 2 of this edition);
- 3) Chapter 3 is "Terms and definitions" (1994 edition no; Chapter 3 of this edition);
- 4) Chapter 4 is "Test Equipment" (Chapter 3 of the 1994 edition; Chapter 4 of this edition);
- 5) Chapter 5, "Specimen Preparation" (Chapter 4 of the 1994 edition; Chapter 5 of this edition);
- 6) Chapter 6, "Test Procedures" (Chapter 5 of the 1994 edition; Chapter 6 of this edition);
- 7) Chapter 7 is "Test Results and Assessment" (Chapter 6 of the 1994 edition; Chapter 7 of this edition);
- 8) Chapter 8 "Calibration of test equipment" (1994 edition no; Chapter 8 of this edition);
- 9) Chapter 9, "Test Records" (1994 edition no; Chapter 9 of this edition);

--- In Chapter 2, "Normative references" to supplement the relevant standards (1994 edition of Chapter 2; Chapter 2 of this edition);

--- Added Chapter 3 "Terms and definitions" (1994 edition no; Chapter 3 of this edition);

--- In Chapter 4 "test equipment" to delete the high-frequency spark testing machine (1994 version 3.1; Chapter 4 of this edition);

--- In Chapter 6, "Test Procedure" to delete the relevant provisions of the high-frequency spark test (1994 version 5.2 and Table 1; 6.2 of this version and Table 1);

--- Added Chapter 8 "Calibration of test equipment" (1994 edition no; Chapter 8 of this edition);

--- Added Chapter 9, "Test Record", specifies the test record should be recorded in the specific content (1994 edition no; Chapter 9 of this edition).

This part is proposed by China Electrical Equipment Industry Association.

This part of the national wire and cable standardization Technical Committee.

This section is drafted. Shanghai Electric Cable Research Institute.

1 Scope

GB/T 3048 provisions of this section extruded protective sleeve spark test terms and definitions, test equipment, sample preparation, test procedures Order, test results and assessment, test equipment calibration and test records.

This section applies to test crowded in the metal sleeve or metal armor layer corrosion protection jacket sealing.

This section should be used together with GB/T 3048.1.

2 Normative references

The following documents contain provisions which, through reference in this part of GB/T 3048, become the provisions of this section. For dated references, its subsequent Amendments (not including errata content) or revisions do not apply to this section, however, to encourage the agreement reached under this section of the parties to study whether the latest version of these documents can be used. For undated references, the latest version applies to this section.

GB/T 2900.10-2001 Electrotechnical terminology cables (idt IEC 60050 (461). 1984) GB/T 3048.1 wire and cable electrical performance test methods - Part 1. General GB/T 3048.9-2007 wire and cable electrical performance test methods - Part 9. insulated wire core spark test JB/T 4278.10 Eraser wire and cable test equipment and equipment testing methods spark testing machine

3 Terms and definitions

GB/T 2900.10-2001 established the following terms and definitions apply GB/T 3048 of this section.

An insulation test by which the electrode applies a test voltage to the electrode as it passes through the surrounding electrode.

4 Test equipment

Power frequency spark testing machine or DC spark testing machine, should be consistent with the relevant provisions of GB/T 3048.9-2007.

5 Sample preparation

The entire manufactured length of the cable.

6 Test procedures

6.1

Spark test should be carried out in the process of extrusion anti-corrosion sleeve, but also in the spark test machine alone.

6.2

When using the power frequency spark testing machine for testing, the test cable metal sheath or armor should be grounded.

When using DC spark testing machine for testing, the test cable metal sheath or armor should generally be connected with the negative pole of the DC power supply.

6.3

The test voltage should be consistent with the provisions of product standards, if the product standard does not provide the appropriate test voltage value, you can recommend Table 1 the voltage value of the test.