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

GB/T 19216.12-2008

**Tests for electric or optical fibre cables under fire conditions --
Circuit integrity -- Part 12: Apparatus -- Fire with shock at a
temperature of at least 830 Celsius**

(English Translation)

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Reference

Foreword

GB/T 19216 "in electric cables under fire conditions - Circuit integrity" is divided into six sections.

--- Part 11. Test equipment --- flame temperature not lower than 750 °C
separately for the fire;

Applying an impact test apparatus --- flame temperature of not lower than 830 °C for fights;.
--- Part 12

--- Part 21. Procedures and requirements --- rated voltage 0.6/1.0kV and below cable;

--- Part 23. Procedures and requirements --- data cable;

--- Part 25. Procedures and requirements --- fiber optic cable;

--- Part 31. for fire with shock - Test procedure and requirements --- rated voltage 0.6/1kV
and below cable.

This section GB/T Part of 1,219,216.

This section identical with IEC 60331-12:2002 "under fire conditions - Circuit integrity - Part
12 cables. Test installed Applying an impact "means --- flame temperature not lower than
830 °C for the fights.

For ease of use, this section made the following editorial changes.

--- This part name is amended as. "In the electric cables under fire conditions - Circuit
integrity - Part 12. Apparatus ---Applying an impact flame temperature not lower than 830
°C for the fights ";

--- This part corresponds to the name, the English name changed to.

"Tests forelectricoropticalfibrecablesunderfire conditions-Circuitintegrity-Part 12.
Apparatus-Firewithshockatatemperatureofat least830 °C ";

--- Remove the IEC 60331-12:2002 Foreword and Introduction;

--- With a decimal point "." Instead of a comma as the decimal point "." this section of
Appendix A normative appendix.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Standardization Technical Committee Wire and Cable
(SAC/TC213) centralized.

This part of the unit responsible for drafting. Shanghai Electric Cable Research Institute.

Participated in the drafting of this section. Wuxi Jiangnan Cable Co., Ltd., Shanghai-Wuxi
City Electric Wire & Cable Co., Ltd., Jiangsu has a new remote cable Limited, Jinlong Yu
Group Co., Ltd., Shanghai Shenghua Cable (Group) Co., Ltd., Sichuan Star Cable Co., Ltd.

1 Scope

GB/T 19216 provisions of this section for the fire and mechanical shock testing conditions
for controlled thermonuclear flame output at a nominal temperature of 850 °C , The test
equipment required to maintain the integrity of the test cable lines used.

Appendix A provides a test with a blowtorch and control system authentication method.

2 Normative references

The following documents contain provisions which, through reference GB/T 19216 in this
section constitute provisions of this section. For dated reference documents Member, all
subsequent amendments (not including errata content) or revisions do not apply to this
section, however, encouraged to reach under this section Parties to research agreement to
use the latest versions of these documents. For undated reference documents, the latest
versions apply to this section.

GB/T 19216.11-2003 in electric cables under fire conditions - Circuit integrity - Part 11.
Apparatus ---Flame temperature not lower than 750 °C \u200b\u200bfor a separate fire
(IEC 60331-11:1999, IDT) GB/T 16839.1-1997 Thermocouples - Part 1. indexing table (idt
IEC 60584-1:1995) IEC Guide 104.1997 Safety Publications application development and
basic safety publications and similar security publications

3 Terms and Definitions

The following terms and definitions apply to this section.

When under fire and prescribed burning time, it can continue to run in the state the ability to

specify.

4.1 Test Environment

The test shall be in a suitable housing having at least 20m³ in the conduct of the cabinet has provided any removal of harmful gases produced by combustion Shi, and to maintain adequate ventilation during the test flame. But should not use forced ventilation.

Note 1: Examples of suitable housing, such as GB/T 17651.1 specified in the combustion chamber.

At the beginning of each test, the test box and the device should be kept between 10 °C ~ 40 °C.

In the cable test and verification process, cabinets and barrier ventilation conditions should be the same.

Note 2: barrier, such as GB/T 17651.1 specified baffles can be put in place to protect the torch, so that air does not affect the geometry of the flame.

Note 3: This part of the test may use hazardous voltage and temperature, should be appropriate protective measures to prevent possible shock, burning, fire and explosion and dangerous, and prevent any harmful gases that may arise.

5 Test device

5.1

Test apparatus consisting of Test equipment should have the following components.

GB/T 19216.12-2008/IEC 60331-12:2002