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

GB/T 19216.31-2008

**Tests for electric or optical fibre cables under fire conditions -- Circuit
integrity -- Part 31: Procedures and requirements for fire with shock --
Cables of rated voltage up to and including 0.6/1 kV**

(English Translation)

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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 19216 of Part 31.

This section identical with IEC 60331-31:2002 "cables under fire conditions - Circuit
integrity - Part 31. applying for fights Plus the impact of the test procedures and
requirements --- rated voltage 0.6/1kV and below cable "(in English).

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 31. impulse applied for fights Hit test procedures and requirements --- rated

voltage 0.6/1kV and below cable ";

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

"Testsforelectricoropticalfibrecablesunderfire conditions-Circuitintegrity-Part 31.

Proceduresandrequirementsforfirewithshock-Cables ofratedvoltageuptoandincluding0.6/1kV
";

--- Remove the IEC 60331-31:2002 Foreword and Introduction;

--- With a decimal point "." Instead of a comma as the decimal point "." 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. Sichuan Star Cable Co., Ltd., Shanghai
Shenghua Cable (Group) Co., Ltd. Jinlong Yu Group Limited Secretary of Jiangsu New
Remote Cable Co., Ltd., Shanghai-Wuxi City Wire and Cable Co., Ltd. Wuxi Jiangnan
Cable.

1 Scope

This section GB/T 19216 specifies the rated voltage 0.6/1kV and below the need to
maintain the integrity of the cable lines in specific conditions Fire and mechanical shock test
procedures and performance requirements, and provides time for the fire. This section is
intended for diameter greater than 20mm test cable.

This section provides sample preparation, continuity checking devices, electrical test
procedures, methods of burning cables and mechanical shock generated Method, and
provides the results of the assessment requirements.

This section applies to low-voltage power cables and control cables with a rated voltage.

NOTE: Although this section is limited to the scope of application of rated voltage 0.6/1kV and
below the cables, but the manufacturer and the purchaser agrees, and is equipped with the
appropriate fuse After the device, the procedure can also be used below the rated voltage of 3.3kV
and cables.

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 13539.5-1999 Low-voltage fuses - Part 3. unskilled personnel Supplementary requirements for fuses (mainly used Fuses for household and similar applications) - Examples of standardized fuses (idt IEC 60269-3-1:1994) GB/T 19216.12-2008 in electric cables under fire conditions - Circuit integrity - Part 12. Apparatus ---Applying an impact flame temperature not lower than 830 °C for the fights (IEC 60331-12:2002, IDT) GB/T 19216.21-2003 in Part 21 Circuit integrity under fire conditions - cable or fiber optic cable. To test procedure and Seeking --- rated voltage 0.6/1.0kV and below cables (IEC 60331-21:1999, IDT) 1997 application development and basic safety publications, safety publications and similar security publications. IEC Guide 104

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 Sample Preparation

Take a length of not less than 1500mm finished cable as a sample, and at each end of the cable sheath or strip about the outer 100mm Sheath.

At each end of the cable, should properly handle each conductor for electrical connection, and should be separated from each other to avoid the exposed conductor GB/T 19216.31-2008/IEC 60331-31:2002