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

GB/T 18380.22-2008

**Tests on electric and optical fibre cables under fire conditions
-- Part 22: Test for vertical flame propagation for a single small
insulated wire or cable -- Procedure for diffusion flame**

电缆和光缆在火焰条件下的燃烧试验 第22部分：单根绝缘细电线电缆火焰垂直蔓延试验 扩散型火焰试验方法

(English Translation)

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Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Test device
- 5 Test procedure
 - 5.1 Sample

Foreword

GB/T 18380 "and optical fiber cables under fire conditions test" is divided into 11 parts.

- Part 11. single insulated wire and cable vertical flame spread test test equipment;
- Part 12. single insulated wire and cable flame test 1kW pre-mixed flame test methods vertical spread;
- Part 13. single insulated wire and cable vertical flame spread test measures the burning dripping test methods (substance)/particles;
- Part 21. single small insulated wire or cable vertical flame spread test test equipment;
- Part 22. single small insulated wire and cable flame test diffusion flame test methods vertical spread;
- Part 31. Vertical bunched wires or cables installed vertical flame spread test test equipment;
- Part 32. Vertical bunched wires or cables installed vertical flame spread test AF/Class R;
- Part 33. bunched wire and cable flame spread of vertically-mounted vertical test class A;
- Part 34. bunched wire and cable flame spread of vertically-mounted vertical test class B;
- Part 35. bunched wire and cable flame spread of vertically-mounted vertical test class C;
- Part 36. Vertical bunched wires or cables installed vertical flame spread test class D.

This section GB/T 18380 of Part 22.

This section identical with IEC 60332-2-2:2004 "Burning Test Part 2-2 and optical fiber cables under fire conditions. Single extermination Margin thin wire cable vertical flame test diffusion flame test methods "(in English) spread.

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

- a) Remove the foreword and introduction of international standards;
- b) increase in the foreword to the national standard of this Part;
- c) use a decimal point instead of a decimal comma "., ". "., ";
- d) with "Part 22" instead of "Part 2-2";
- e) Part 2 of this chapter refers to the use of international standards, rather than national standards with international standards in China.

Appendix A of this section is an informative annex.

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

This part of the National Standardization Technical Committee of wire and cable.

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

Participated in the drafting of this section. Baosheng Science and Technology Innovation Co., Ltd. Shanghai Yalong Industry Group Co., Ltd., Yangzhou dawn of the cable has Limited, Shanghai Nanyang Electric Wire Co., Ltd., Anhui Valin Cable Group Limited.

1 Scope

GB/T 18380 provisions of this section under fire conditions, a single small insulated wire or cable thin cable vertical flame spread test method. Test equipment specified in 18380.21-2008 in GB/T .

When the test method GB/T 18380.12-2008 shall not apply, such as during the test for the fire may break the thin cable or conductor may can thin wire fusing. This standard recommends testing thin cable, the total cross section of less than 0.5mm² insulated wire and cable.

Note: The use of this standard in line with insulated wire and cable is not sufficient to prevent flame spread all laying conditions. In some high-risk situations, such as when the beam length of wire large vertical laying of a sample can not be considered consistent with the standard performance requirements, from the types of wire bundle will show the same sex Energy (see GB/T 18380.31 ~ 36 series of standards).

Recommended performance requirements in Appendix A.

2 Normative references

The following documents contain provisions which, through reference GB/T 18380 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 /16499-1996 electrical safety standards guide the preparation of the T (eqv IEC Guide104. 1984) GB/T 18380.21-2008 and optical fiber cables under fire conditions - Part 21 Combustion test. a single small insulated wire or cable Test for vertical flame spread test equipment (IEC 60332-2-1:2004, IDT) IEC 60695-4:1993 Fire hazard testing - Part 4. Terminology concerning fire tests

3 Terms and Definitions

GB/T 18380 in this section uses the following terms and definitions.

Trigger combustion energy.

[IEC 60695-4:1993, definitions 2.76] 3.2 Due to incomplete combustion or pyrolysis carbon residue formation.

[IEC 60695-4:1993, definitions 2.12]

4 Test device

GB/T test apparatus 18380.21-2008 prescribed.

5.1 Sample

The specimen shall be a long (600 ± 25) mm wire and cable.

GB/T 18380.22-2008/IEC 60332-2-2:2004