ICS 33.180.10
CCS M33

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 29199-2012

Test methods for rodent resistance of optical fiber cable

光缆防鼠性能测试方法

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Table of Contents

Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. The standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China. The standard by the China Communications Standards Association. This standard was drafted. Beijing CCS Optical Fiber Cable Co., Ltd., Chengdu CCS Optical Fiber Cable Co., Ltd., Beijing University of Posts and Telecommunications, Beijing Tong and beneficial electricity Letter Institute of Science and Technology Co., Ltd., Wuhan Research Institute of Posts and Telecommunications, Optical Fiber and Cable Co., Ltd., Jiang Su Yongding Co., Ltd., Jiangsu Su Heng photoelectric Limited. The main drafters of this standard. Ji Lei, Yang Shixin, Xiao Bin, Wang Zhenyue, SONG Zhi Tacitus, Lei Fei, Shi Huiping Xiong Zhuang,

Chen Xiaohong, Ma Jianlin.

Cable industry calls "Rodents", usually due to the laying of the cable environment caused by a rodent bite function failure, reduced service life Short and communication is interrupted. Rodents communication failure caused by social and economic activities suffered immeasurable loss. "Rodent" concept in "Rat" refers to cause such damage to the cable rodent. Three test methods specified in this standard are focused on testing several different rodent face cable capacity. Setting the standard mouse, rat by the standard of Different mouse; bite cable and fiber optic cable by rodents after a comprehensive evaluation of corrosion resistance, to unify the evaluation of the performance of different rodent cable Disaster Type, simulation mouse teeth to improve the consistency of test results, and speed testing and design of the cable puncture resistance test; different Type of rodent, rodents cable through the bite of non-metallic material damage characteristics evaluation of the cable sheath to prevent the ability to target specific mouse. needle Different aspects and different purposes rodent cable capacity, different selection methods specified in this standard may be tested. Chemical rodent and non-metallic cable test methods to be rodent-repellent effect study. Users of this standard is recommended for rodents performance indicators and the practical application of the cable collection, comparison, clearly laying different environment Cable performance requirements rodents, rodent cable guide and promote the design, manufacture and application. When issuing authority of the document drew attention to the statement of compliance with this document may involve Chapter 6, "Method B Mechanical Simulation rat bite Law" And Cable and material destruction of anti-rodent test methods and apparatus related to the ability to use the patent. The issuing authority for the patent document authenticity, validity and scope without any position. The patent holder has to ensure that the issuing authority of the document, he was willing to reasonable and non-discriminatory terms and conditions with any applicant, Patent licensing negotiations. The patent holder's statement has been filed in the release mechanism of the present document. Related information is available through the following Contact at. Patent holder. Chengdu CCS Optical Fiber Cable Co., Ltd. Address. Siemens Road, Chengdu, Sichuan, China Hi-tech Development Zone No.

1 Please note that in addition to the above patents, some of the contents of this document may still involve patents. The issuing authority of this document does not undertake to recognize these special Lee responsibility. Rodent cable performance test methods

1 Scope

GB/T 29199-2012 addresses an unglamorous but expensive failure mode: rodents chewing through optical fibre cable. Buried and duct-run cable is attractive to gnawing animals, the damage is done in minutes, and the outage that follows is measured in the cost of locating a fault along a route that may run for kilometres. Cable is therefore built to resist it - usually with metallic armour rather than with chemical repellents, which leach out and lose their

effect. This standard specifies three test methods for evaluating that resistance, giving for each the test apparatus, the specimens, the procedure, the treatment of results and the content of the test report. It applies to cables with single-layer or multi-layer metallic armour whose sheath materials contain no repellent chemicals, where the armour may take the form of metal tube or longitudinally applied metal tape. Under ICS 33.180.10 and CCS M33, it is the reference for cable manufacturers substantiating a rodent-resistance claim, for the telecom operators and utilities writing that claim into a purchase specification, and for the laboratories asked to verify it.

This standard specifies three rodent performance test methods and test reports showing samples include testing apparatus, procedures, results and so on. This standard is applicable to a single-layer or multi-layer metal armor and does not contain any chemicals like repellent cable sheath materials, metal armor Rodent-repellent properties of materials evaluation. Wherein the metal armor layer may be a metal pipe, longitudinally (or wrapping) metal strip or stranded (or woven) wire. Rodent performance testing of similar structure to other products such as cables can also refer to use.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. GB /1040.2-2006 Plastics Determination of tensile properties T Part 2. Test plastics molding and extrusion conditions

GB 14922.1-2001 Laboratory Animal parasitology rating and monitoring

GB 14922.2-2001 Laboratory Animal Microbiology rating and monitoring

GB 14924.2-2001 animal feed hygiene standards

GB 14924.3-2010 animal feed nutrients

GB 14925-2010 Laboratory Animal Facilities and Environment

GB/T 16491-2008 electronic universal testing machine

GB/T 19291-2003 Corrosion test Corrosion of metals and alloys General principles (ISO 11845.1995, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Control sheath material referencesheathmaterial Customer consultation and evaluation unit selected for rat bite test, as compared to the reference cable jacket material.

3.2 Control samples cable referencecablesample Sheath material with a certain thickness of the control cable as a sample jacket layer.

3.3 Indented single type debris onetoothmarkgnawedpiece Rat bite sample produced only one incisor bite marks debris, shown in Figure 1. Figure