



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

GB/T 17737.8-2022

**Coaxial communication cables - Part 8: Sectional specification
for semi-flexible cables with polytetrafluoroethylene (PTFE)
dielectric**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents"

drafted.

This document is part 8 of GB/T 17737 "Coaxial Communication Cables". GB/T 17737 has published the following parts.

--- Part 1. General Specifications General Principles, Definitions and Requirements.

* Part 1-100. General Requirements for Electrical Test Methods;

* Part 1-101. Electrical test method Conductor DC resistance test;

* Part 1-102. Electrical test method Cable dielectric insulation resistance test;

* Part 1-103. Electrical test method Capacitance test of cables;

* Part 1-104. Electrical Test Methods Capacitance Stability Test of Cables;

* Part 1-105. Electrical test methods for the withstand voltage test of cable media;

* Part 1-106. Electrical test methods for the withstand voltage test of cable jackets;

* Part 1-107. Electrical Test Methods Cable Microphonic Charge Level (Mechanical Induced Noise) Test;

* Part 1-108. Electrical Test Methods Characteristic Impedance, Phase Delay, Group Delay, Electrical Length and Propagation Velocity Tests;

* Part 1-112. Electrical Test Methods Return Loss (Impedance Consistency) Test;

* Part 1-115. Electrical Test Methods Impedance Uniformity (Pulse/Step Function Return Loss) Test;

* Part 1-122. Electrical test methods for crosstalk between coaxial cables;

* Part 1-200. General Requirements for Environmental Test Methods;

- * Part 1-201.Environmental test method for cold bending performance test of cables;
- * Part 1-203.Environmental test methods for water seepage test of cables;
- * Part 1-205.Environmental Test Methods Solvent Resistance and Contaminated Liquid Test;
- * Part 1-301.Mechanical Test Methods Ovality Test;
- * Part 1-302.Mechanical Test Method Eccentricity Test;
- * Part 1-308.Mechanical test methods for tensile strength and elongation of copper-clad metals;
- * Part 1-310.Mechanical test methods for torsional properties of copper-clad metals;
- * Part 1-313.Mechanical Test Methods for Adhesion of Media and Sheathing;
- * Part 1-314.Mechanical test methods for bending test of cables;
- * Part 1-316.Mechanical test method Maximum tensile force test of cables;
- * Part 1-317.Mechanical Test Methods Cable Compression Test;
- * Part 1-318.Mechanical Test Methods Thermal Performance Test;
- * Part 1-324.Mechanical Test Methods Cable Abrasion Test;
- * Part 1-325.Mechanical Test Methods Wind-Induced Vibration Test;
- Part 2.Polytetrafluoroethylene (PTFE) insulated semi-rigid radio frequency coaxial cable sub-specification;
- Part 3.Sub-specification for coaxial cables for local area networks;
- Part 4.Sub-specification for leaky cables;
- Part 5.Sub-specification for trunk and distribution cables for CATV;
- Part 8.PTFE insulated semi-flexible cable sub-specification.
- * Part 8-1.Blank detail specification for PTFE insulated semi-flexible cables.

This document uses the redrafted law to modify the use of IEC 61196-8.2012 "Coaxial Communication Cables - Part 8.Polytetrafluoroethylene Insulated Semi-Flexi Cable Sub-Specification.

Compared with IEC 61196-8.2012, the structure of this document has been adjusted, as follows.

--- In order to avoid the suspension section, 7.1 "General Rules" is added, and the subsequent clause numbers are extended;

--- Added Normative Appendix A for inclusion of additional test procedures.

The technical differences between this document and IEC 61196-8.2012 and their reasons are as follows.

--- Regarding normative reference documents, this document has made adjustments with technical differences to adapt to the technical conditions of our country and the adjustment situation

Centrally reflected in Chapter 2 "Normative References", the specific adjustments are as follows.

- * Replace IEC 60068-1.1988 with GB/T 2421-2020 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-101 with GB/T 17737.101-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-102 with GB/T 17737.102-2018 which is equivalent to the international standard;
- * Replace IEC 61196-1-103 with GB/T 17737.103-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-105 with GB/T 17737.105-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-108 with GB/T 17737.108-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-112 with GB/T 17737.112-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-115 with GB/T 17737.115-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-201 with GB/T 17737.201-2015 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-301 with GB/T 17737.301-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-302 with GB/T 17737.302-2018 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-313 with GB/T 17737.313-2015 which is equivalent to adopting international standards;
- * Replace IEC 61196-1-314.2006 with GB/T 17737.314-2018 which is equivalent to adopting international standards;

* Replace IEC 61196-1-316 with GB/T 17737.316-2018 which is equivalent to adopting international standards;

* Replace IEC 62037-1 with GB/T 21021.1-2021 which is equivalent to adopting international standards;

* Replace IEC 62037-4 with GB/T 21021.4-2021 which is equivalent to adopting international standards;

* Replace IEC 60068-2-20 with dated IEC 60068-2-20.2008;

* Added references to GB/T 728-2020, GB/T 4910-2009, GB/T 8815-2008, GB/T 36634-2018,

HG/T 2904-1997, JB/T 3135-2011, YD/T 1113-2015.

--- Deleted the frequency range 500MHz~18GHz in Chapter 1 of the international standard to improve operability;

--- Deleted "4.4.1 in IEC 61196-1" in International Standard 4.2, and added the standard that the inner conductor should meet;

--- Delete the specific requirements for tolerance in International Standard 4.3;

--- Changed the standards that the raw materials for cables should meet in International Standard 4.4, and deleted the specific requirements for tolerances;

--- Changed the standard that the sheath should meet in International Standard 4.5, added "requirements for sheath color", and deleted the sheath tolerance

Require;

--- Added footnotes in Table 1 of the International Standard;

--- Changed Table 2 of the International Standard, deleted 7.1.6, added 7.2.1 and 7.2.13, and added test procedures (see Appendix A),

Added the requirement of 7.2.5 "The sheath should have no breakdown, flashover or spark discharge", and deleted the typical value in the requirement of 7.2.7;

--- Changed Table 3 of the international standard, modified the test procedures and parameters of 7.3.3 according to the actual application, added 7.3.4 and 7.3.5,

And added test procedures (see Appendix A);

--- Changed the solder bath temperature of the soldering heat resistance test to "260°C +/- 3°C" and the immersion time to "10s +/- 1s" (see Appendix A);

--- Changed Table 4 of the international standard, and modified the test procedures of 7.4.5 and 7.4.1, 7.4.6, 7.4.7, 7.4.8 according to the actual application