

ICS 29.060.20
CCS K 13



中华人民共和国国家标准
NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 33594-2025
Replaces GB/T 33594-2017

Charging Cables for Electric Vehicles
电动汽车充电用电缆

(English Translation)

Issued on 2025-10-05

Implemented on 2026-05-01

Jointly Issued by
State Administration for Market Regulation of the People's Republic of China &
Standardization Administration of the People's Republic of China

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Charging Cables for Electric Vehicles

1 SCOPE

This document specifies the service characteristics, designation methods, technical requirements, marking, test methods and requirements, inspection rules as well as packaging, transportation and storage of charging cables for electric vehicles.

This document is not only applicable to the charging cables (including signal/control wire core) of rated voltages up to and including AC 0.6/1 kV and DC 1.5 kV for connection set of conductive charging for electric vehicles, but also applicable to the discharging cables of rated voltages up to and including AC 0.6/1 kV and DC 1.5 kV for connection set of externally conductive discharging for electric vehicles with discharging function.

2 NORMATIVE REFERENCES

The following normative documents contain provisions which, through normative reference in this text, constitute essential provision of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

GB/T 1690-2010	Rubber, vulcanized or thermoplastic - Determination of the effect of liquids
GB/T 2423.3-2016	Environmental testing—Part 2: Testing method—Test Cab: Damp heat, steady state
GB/T 2900.10	Electrotechnical terminology—Electric cables
GB/T 3048.4	Test methods for electrical properties of electric cables and wires—Part 4: Test of DC resistance of conductors
GB/T 3048.5	Test methods for electrical properties of electric cables and wires - Part 5: Test of insulation resistance
GB/T 3048.8	Test methods for electrical properties of electric cables and wires - Part 8: AC Voltage test
GB/T 3048.9	Test methods for electrical properties of electric cables and wires - Part 9: Spark test of insulated cores
GB/T 3048.14	Test methods for electrical properties of electric cables and wires - Part 14: DC voltage test
GB/T 3956	Conductors of insulated cables
GB/T 4909.2-2009	Test methods for bare wires - Part 2: Measurement of dimensions
GB/T 5013.2-2008	Rubber insulated cables of rated voltages up to and including 450/750V - Part 2: Test methods
GB/T 5563-2013	Rubber and plastics hoses and hose assemblies—Hydrostatic testing
GB/T 6031-2017	Rubber, vulcanized or thermoplastic—Determination of hardness (hardness between 10 IRHD and 100 IRHD)
GB/T 7113.2	Flexible insulating sleeving—Part 2: Methods of test
GB/T 16422.2-2022	Plastics—Methods of exposure to laboratory light sources—Part 2: Xenon-arc lamps
GB/T 17650.1-2021	Test on gases evolved during combustion of materials from cables or optical fiber cables—Part 1: Determination of the halogen acid gas content
GB/T 17650.2-2021	Test on gases evolved during combustion of materials from cables or optical fiber cables—Part 2: Determination of acidity (by pH

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