

ICS 43.040.10



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

GB/T 20718.2-2025

**Road vehicles - Connectors for the electrical connection of towing and
towed vehicles (13-pole) - Part 2: 13-pole connectors for vehicles with
12 V nominal supply voltage intended to cross water fords**

(English Translation)

Issued on: February 28, 2025

Implemented on: September 1, 2025

Issued by: State Administration for Market Regulation

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020

"Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents".

This document is Part 2 of GB/T 20718.GB/T 20718 has issued the following parts.

- Road vehicles - Connectors for the electrical connection of towing and towed vehicles - 13-pole connector for vehicles with 12 V nominal supply voltage;
- Road vehicles - Connectors for the electrical connection of towing and towed vehicles (13-pole) - Part 2.13-pole connectors for vehicles with 12 V nominal supply voltage intended to cross water fords.

This document is identical to ISO 11446-2.2012 "Road vehicles - Connectors for the electrical connection of towing and towed vehicles (13-pole) - Part 2.13-pole connectors for vehicles with 12 V nominal supply voltage intended to cross water fords".

This document has made the following minimal editorial changes.

- In order to coordinate with the existing standards, the standard name is changed to "Road vehicles - Connectors for the electrical connection of towing and towed vehicles (13-pole) - Part 2.13-pole connectors for vehicles with 12 V nominal supply voltage intended to cross water fords";
- The order of water influence test and water immersion test in 6.2.3 of ISO 11446-

2.2012 is inconsistent with that in 6.1, so the relevant description in 6.2.3 is corrected to keep it consistent with 6.1.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority of this document shall not be held responsible for identifying any or all such patent rights.

This document was proposed by Ministry of Industry and Information Technology of the People's Republic of China.

This document shall be under the jurisdiction of National Technical Committee of Auto Standardization (SAC/TC 114).

Drafting organizations of this document. China National Heavy Duty Truck Group Co., Ltd., Changsha Automotive Electrical Testing Center Co., Ltd., Jaeger Poway Automotive Parts (Shenzhen) Co., Ltd., Beijing Foton Daimler Automobile Co., Ltd., Shaanxi Automobile Group Co., Ltd., Henan Tianhai Auto Electronics Group Co., Ltd., Jinan Youfeng Electronics Co., Ltd.

Road vehicles - Connectors for the electrical connection of towing and towed vehicles (13-pole) - Part 2.13-pole connectors for vehicles with 12 V nominal supply voltage intended to cross water fords

1 Scope

This document specifies the dimensions, application, tests, and requirements for 13-pole connectors for the electrical connection of towing and towed vehicles with 12 V nominal supply voltage and intended to cross water fords, as well as the requirements

for the park sockets for storing the plug when the plug and socket are disconnected.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1103 Road vehicles - Coupling balls for caravans and light trailers - Dimensions

NOTE: GB/T 25980-2010 Road vehicles - Coupling balls for caravans and light trailers - Dimensions (ISO 1103:2007, IDT)

ISO 4091 Road vehicles - Connectors for the electrical connection of towing and towed vehicles - Definitions, tests and requirements

NOTE: GB/T 5053.3-2006 Road vehicles - Connectors for the electrical connection of towing and towed vehicles - Definitions, tests and requirements (ISO 4091:2003, IDT)

ISO 4141 (all parts) Road vehicles - Multi-core connecting cables

NOTE: GB/T 5054.1-2024 Road vehicles - Multi-core connecting cables - Part 1. Test methods and requirements for basic performance sheathed cables (ISO 4141-1:2019, MOD)

GB/T 5054.2-2024 Road vehicles - Multi-core connecting cables - Part 2. Test methods and requirements for high performance sheathed cables (ISO 4141-2:2019, IDT)

GB/T 5054.3-2024 Road vehicles - Multi-core connecting cables - Part 3. Construction, dimensions and marking of unscreened sheathed low-voltage cables (ISO 4141-3:2019, IDT)

GB/T 5054.4-2024 Road vehicles - Multi-core connecting cables - Part 4. Test methods and requirements for coiled cable assemblies (ISO 4141-4:2009, MOD)

ISO 11446-1 Road vehicles - Connectors for the electrical connection of towing and towed vehicles - Part 1. 13-pole connectors for vehicles with 12 V nominal supply voltage not intended to cross water fords

3 Terms and definitions

For the purpose of this document, the terms and definitions defined in ISO 4091 apply.

4 Dimensions

The dimensions of plugs, sockets, and park sockets shall comply with the provisions of ISO 11446-1. Details not specified in this document are left to the discretion of the manufacturer. When the plug and socket are engaged, the contacts shall be floating and shall be able to align with the reference position.

5.1 Positions and free space of connectors

The positions and free space of connectors shall comply with the requirements of ISO

5.2 Allocation and marking of contacts

The allocation and marking of contacts shall comply with the requirements of ISO 11446-1.

5.3 Terminals

The terminals behind the plugs and sockets shall be able to connect wires of the nominal cross-sectional area defined in ISO 11446-1. If the terminals are connected to wires of other cross-sectional areas, it shall be determined by agreement between the manufacturer and the user.

5.4 Connecting cables

The connecting cables shall comply with the requirements of ISO 4141 (all parts).

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