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**Technical Requirements and Testing Methods for  
Commercial Vehicle and Trailer Braking Systems**  
**商用车辆和挂车制动系统技术要求及试验方法**

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# Technical Requirements and Testing Methods for Commercial Vehicle and Trailer Braking Systems

## 1 SCOPE

This Standard specifies the technical requirements and testing methods for commercial vehicle and trailer braking systems.

This Standard applies to power-driven vehicles of categories M<sub>2</sub>, M<sub>3</sub> and N and trailers of category O, as specified in GB/T 15089.

This Standard does not cover:

- Vehicles with a design speed not exceeding 25 km/h;
- Trailers which may not be coupled to power-driven vehicles with a design speed exceeding 25 km/h.

## 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.

GB/T 3730.1 Motor vehicles and trailers-Types-Terms and definitions

GB/T 3730.2 Road vehicle-Masses-Vocabulary and codes

GB/T 5620 Road vehicles - Braking of automotive vehicles and their trailers - Vocabulary

GB/T 5922 Motor vehicles and towed vehicles - Pressure test connection for compressed-air pneumatic braking equipment

GB/T 13594-2003 Antilock braking performance and test procedure for motor vehicles and their trailers

GB/T 15089 Classification of power-driven vehicles and trailers

GB/T 20716.1 Road vehicles - Connectors for the electrical connection of towing and towed vehicles - Part 1: Connectors for braking systems and running gears of vehicles with 24V nominal supply voltage

GB/T 20716.2 Road vehicles - Connectors for the electrical connection of towing and towed vehicles - Part 2: Connectors for braking systems and running gears of vehicles with 12V nominal supply voltage

ISO 11992-1 Road vehicles - Interchange of digital information on electrical connections between towing and towed vehicles - Part 1: Physical and data-link layer

ISO 11992-2:2003 Road vehicles - Interchange of digital information on electrical connections between towing and towed vehicles - Part 2: Application layer for brakes and running gear

## 3 TERMS AND DEFINITIONS

For the purpose of this document, the following terms and definitions and those given in GB/T 3730.1, GB/T 3730.2, GB/T 5620 and GB/T 15089 apply.

### 3.1 Basic terms and definitions

#### 3.1.1 Vehicle type

##### 3.1.1.1 Motor vehicle

With regard to braking system, the vehicles which do not differ in such essential respects as:

- The vehicle category;

- The maximum design total mass;
- The distribution of mass among the axles;
- The maximum design speed;
- A different type of braking equipment, with more particular reference to the presence or otherwise of equipment for braking a trailer, or any presence of an electric regenerative braking system;
- The number and arrangement of the axles;
- The engine type;
- The number and ratios of gears;
- The final drive ratios;
- The tyre dimensions.



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