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

GB/T 46161.2-2025

**Road vehicles - Pneumatic braking systems - Part 2: Pipes,
male fittings and tapped holes with conical sealing surface**

道路车辆 气压制动系 第2部分：管、锥面密封外螺纹接头和螺纹孔

(English Translation)

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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 46161 "Road vehicles - Pneumatic braking systems".

GB/T 46161 has already issued the following parts.

- Part 1.Pipes, male fittings and tapped holes with facial sealing surface;
- Part 2.Pipes, male fittings and tapped holes with conical sealing surface.

This document has modified and adopted ISO 4039-2.1998 "Road vehicles - Pneumatic braking systems - Part 2.Pipes, male fittings and tapped holes with conical sealing surface".

Compared with ISO 4039-2.1998, this document has undergone the following structural adjustments.

- ADD the Clause 3;
- Clause 4 corresponds to Clause 3 of ISO 4039-2.1998, whit subclauses 4.1 ~ 4.3 corresponding to subclauses 3.1 ~ 3.3 of ISO 4039-2.1998;
- Clause 5 corresponds to Clause 4 of ISO 4039-2.1998, with subclauses 5.1 ~ 5.3

corresponding to subclauses 4.1 ~ 4.3 of ISO 4039-2.1998;

- Bibliography corresponds to Annex B of ISO 4039-2.1998.

The technical differences between this document and ISO 4039-2.1998 and the reasons therefor are as follows.

- MODIFY the pipe dimensions (see 4.1), to adapt to the current situation of products in China;

- REPLACE ISO 9227 with the normatively referenced GB/T 10125 (see 4.3), to adapt to the technical requirements of China;

- MODIFY the requirements for surface protection (see 4.3, 5.3), to adapt to the requirements of different materials in China.

This document has made the following editorial change.

- REPLACE ISO 6149 with the informatively referenced GB/T 2878 (see Annex A).

Road vehicles - Pneumatic braking systems - Part 2. Pipes,
male fittings and tapped holes with conical sealing surface

1 Scope

This document specifies the basic dimensions, material requirements, and surface protection requirements for metallic pipes and thermoplastic pipes, male fittings and tapped holes with conical sealing surface used in pneumatic braking systems on road vehicles operating at system pressures below 2 MPa.

This document applies to pneumatic braking systems on automobiles and trailers with an air pressure below 2 MPa.

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 10125 Corrosion tests in artificial atmospheres - Salt spray tests

3 Terms and definitions

This document does not contain any terms or definitions that need to be defined.

4.1 Dimensions of pipes

The outer diameter D1 shall be selected from the values specified in Table 1 and used in combination with the thread dimensions specified in Table 3.

4.2 Materials of pipes

Pipes can be made of metallic materials (e.g., steel, copper, copper alloys, etc.) or thermoplastic materials (e.g., polyamide, etc.).

4.3 Surface protection of pipes

The inner and outer surfaces of the pipes shall be protected and kept smooth and clean.

The outer surface of metal parts shall be treated with anti-corrosion measures. After a neutral salt spray test according to GB/T 10125, the outer surface of the metal parts shall meet the requirements of Table 2.

5.1 Dimensions and fittings of tapped holes

The type and dimensions of tapped holes shall comply with the specifications in Figure

1 and Table 3. See Annex A for the relationship with GB/T 2878.

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