
**Road vehicles — Hydraulic braking
systems —**

Part 1:

**Double-flare pipes, tapped holes, male fittings
and tube seats**

Véhicules routiers — Dispositifs de freinage hydraulique —

*Partie 1: Tuyauteries à double renflement, logements, raccords mâles et
siège-guides rapportés*



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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 13486-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 2, *Braking systems and equipment*.

ISO 13486 consists of the following parts, under the general title *Road vehicles — Hydraulic braking systems*:

- *Part 1: Double-flare pipes, tapped holes, male fittings and tube seats*
- *Part 2: Flare-to-flare connections*

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Road vehicles — Hydraulic braking systems —

Part 1:

Double-flare pipes, tapped holes, male fittings and tube seats

1 Scope

This part of ISO 13486 specifies the essential dimensional and physical characteristics for double flares of metallic pipes (with and without surface protection), tapped holes, male fittings, and driving fit seats used in hydraulic braking systems for road vehicles.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 13486. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 13486 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 4038:1996, *Road vehicles — Hydraulic braking systems — Simple flare pipes, tapped holes, male fittings and hose end fittings*.

ISO 9227:1990, *Corrosion tests in artificial atmospheres — Salt spray tests*.

3 Pipes

3.1 Pipe without flares

Double-walled, rolled pipes shall be in accordance with ISO 4038 and Table 1.

3.2 Double-flare pipes

Double-flare pipes shall meet the requirements of Figure 1 and Table 2.

3.3 Material requirements

The material shall meet the requirements of Table 3.

3.4 Condition

The inner and outer surfaces shall be free from oxidation. The outer surface shall be protected against corrosion and shall withstand the salt spray test according to ISO 9227 for at least 96 h.