

International Standard

ISO 4000-1

Thirteenth edition 2024-03

Passenger car tyres and rims —

Part 1: **Tyres (metric series)**

Pneumatiques et jantes pour voitures particulières —
Partie 1: Pneumatiques (série millimétrique)



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 3, *Passenger car tyres and rims*.

This thirteenth edition cancels and replaces the twelfth edition (ISO 4000-1:2021), which has been technically revised.

The main changes are as follows:

- high load capacity tyres have been added to facilitate their worldwide harmonized introduction;
- design section widths greater than 405 have been removed from load indices Tables B.1 and B.3;
- new internationally harmonized load indices have been added in Annex B.

A list of all parts in the ISO 4000 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Passenger car tyres and rims —

Part 1:

Tyres (metric series)

1 Scope

This document specifies the designation, dimensions and load ratings of metric-series tyres primarily intended for passenger cars.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 3877-1, Tyres, valves and tubes — List of equivalent terms — Part 1: Tyres

ISO 4223-1, Definitions of some terms used in the tyre industry — Part 1: Pneumatic tyres

ISO 16992, Passenger car tyres — Spare unit substitutive equipment (SUSE)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 3877-1, ISO 4223-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

3.1

rim protector

feature incorporated into the lower sidewall area of the tyre which is intended to protect the rim flange from damage

EXAMPLE Protruding circumferential rubber rib.

3.2

high load capacity tyre

extra load tyre that is designed to carry a higher load at the same reference pressure

4 Designation

4.1 Size and construction

4.1.1 Characteristics

The tyre characteristics shall be designated: