



**International
Standard**

ISO 18164

**Motorcycle tyres rolling resistance
measurement methods — Single
point test**

**Second edition
2026-08**

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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*.

This second edition of ISO 18164 cancels and replaces ISO 18164:2005 and ISO 28580:2018, which have been technically revised.

The main change is as follows:

- the measuring methods for passenger car, truck and bus tyres, and the optional test methods of the former [Annex B](#) have been removed.

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Motorcycle tyres rolling resistance measurement methods — Single point test

1 Scope

This document specifies methods for measuring rolling resistance, under controlled laboratory conditions, for new pneumatic tyres designed primarily for use on motorcycles. The relationship between values obtained and the fuel economy of the vehicle is undetermined, and such values are not intended to be used to indicate levels of performance or quality.

This document applies to motorcycle tyres.

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in 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 rolling resistance

F_r
loss of energy (or energy consumed) per unit of distance travelled

Note 1 to entry: The SI unit conventionally used for the rolling resistance is the newton metre per metre (N·m/m). This is equivalent to a drag force in newtons (N).

3.2 rolling resistance coefficient

C_r
ratio of the rolling resistance to the load on the tyre

Note 1 to entry: Rolling resistance is measured in newtons (N).

Note 2 to entry: Load on the tyre is measured in kilonewtons (kN).

Note 3 to entry: Although this quantity is dimensionless, it is conventionally expressed in N/kN.