
**Heavy commercial vehicles and
buses — Test method for steering
effort measurement when
manoeuvring at low speed or with
stationary vehicle**

*Véhicule utilitaires lourds et autobus — Méthode d'essai pour la
mesure des efforts de direction lors de braquage à basse vitesse ou sur
place*



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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 documents 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 22, *Road vehicles*, Subcommittee SC 33, *Vehicle dynamics and chassis components*.

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.

Heavy commercial vehicles and buses — Test method for steering effort measurement when manoeuvring at low speed or with stationary vehicle

1 Scope

This document specifies a test method for steering effort measurement when manoeuvring a vehicle at low speed or with the vehicle stationary. It is mainly applicable to trucks having a mass exceeding 3,5 tonnes and buses and articulated buses having a mass exceeding 5 tonnes, according to ECE and EC vehicle classification, i.e. categories M3, N2, N3.

This document can also be applicable to trucks having a mass not exceeding 3,5 tonnes and buses and articulated buses having a mass not exceeding 5 tonnes, i.e. categories M2, N1.

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 8855, *Road vehicles — Vehicle dynamics and road-holding ability — Vocabulary*

ISO 15037-2, *Road vehicles — Vehicle dynamics test methods — Part 2: General conditions for heavy vehicles and buses*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8855 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 offset

distance of a rim from its hub mounting surface to the centreline of the wheel

Note 1 to entry: A positive rim offset is when the hub mounting surface is more toward the outside of the centreline of the wheel.

3.2

catch up

point when the steering-wheel torque abruptly increases while increasing the steering-wheel speed

Note 1 to entry: (See [Figure 3](#)).

Note 2 to entry: On a hydraulic or an electric-hydraulic system this is usually the point when the steering servo fluid pump reaches the limit when the fluid flow is no longer sufficient to give the required output torque to turn the steering wheel.