
**Road vehicles — Spark-plugs and their
cylinder head housings — Basic
characteristics and dimensions**

*Véhicules routiers — Bougies d'allumage et leur logement dans la
culasse — Caractéristiques élémentaires et dimensions*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 28741 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 1, *Ignition equipment*.

Introduction

The purpose of this International Standard is to provide a compact and concise specification on spark-plugs and their cylinder head housings, which will replace the large number of existing individual International Standards on each type of spark-plug.

It is intended to specify the main properties, the design requirements and the dimensions of most of the existing types of spark-plugs and their cylinder head housings. In this way, the user will be able to work with one comprehensive document valid for most types of spark-plugs, instead of a number of documents, each of which is specified for one type only.

The testing of spark-plugs is covered in ISO 11565.

It is intended to withdraw the following International Standards on spark-plugs and their cylinder head housings as soon as this International Standard is published: ISO 1919, ISO 2344, ISO 2345, ISO 2346, ISO 2347, ISO 2704, ISO 2705, ISO 8470, ISO 14508, ISO 16246, ISO 19812 and ISO 22977.

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Road vehicles — Spark-plugs and their cylinder head housings — Basic characteristics and dimensions

1 Scope

This International Standard specifies the main properties and dimensions of spark-plugs, including the terminals and the dimensions of their cylinder head housings, for use with spark-ignition engines.

This International Standard does not cover screened and waterproof spark-plugs (see ISO 3412, ISO 3895 and ISO 3896).

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.

ISO 68-1, *ISO general purpose screw threads — Basic profile — Part 1: Metric screw threads*

ISO 261, *ISO general purpose metric screw threads — General plan*

ISO 965-1, *ISO general-purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

ISO 965-3, *ISO general purpose metric screw threads — Tolerances — Part 3: Deviations for constructional screw threads*

ISO 4095, *Aerospace — Bihexagonal drives — Wrenching configuration — Metric series*

ISO 6518-1, *Road vehicles — Ignition systems — Part 1: Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6518-1 and the following apply.

3.1

installed height

L

distance from the contact point of the cylinder head to the top of the spark-plug terminal, including the compressed gasket thickness with the spark-plug installed at the specified installation torque

NOTE For conical seating, the contact point is defined from the gauge point of the seat.

3.2

spark-plug thread size

nominal size of the spark-plug thread used to interface between the spark-plug and the cylinder head thread

NOTE These are standard metric threads, with the exception of the M14 × 1,25 thread.