INTERNATIONAL STANDARD

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Second edition
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Road Vehicles — Glow plugs with conical seating and their cylinder head housing —

Part 1: Basic characteristics and dimensions for metal-sheath-type glow plugs

Véhicules routiers — Bougies de préchauffage à fourreau et à siège conique et leur logement dans la culasse —

Partie 1: Caractéristiques de base et dimensions des bougies de préchauffage à fourreau de type métallique

Reference number
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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 32, *Electrical and electronic components and general system aspects*.

This second edition cancels and replaces the first edition (ISO 17447-1:2015), which has been technically revised.

The main changes are as follows:

— Tables 1, 2, 4, 6, 7 include now M9x1;

— Figure A.1 includes now M9.

A list of all parts in the ISO 17447 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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Introduction

The purpose of this document is to provide a compact and concise specification on glow plugs and their cylinder head housings, which shall replace the existing single standards on each type of glow plugs.

It is intended to specify the main properties, the design requirements and the dimensions of most of the existing types of glow plugs and their cylinder head housings. This should enable the user to work with one comprehensive document valid for most types of glow plugs instead of a number of standards each of them specified for one type only.

This document covers basic characteristics and dimensions for metal-sheath-type glow plugs. ISO 17447-2 covers basic characteristics and dimensions for ceramic-sheath-type glow plugs. Tests and requirements are defined in ISO 17447-3.

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Road Vehicles — Glow plugs with conical seating and their cylinder head housing —

Part 1: Basic characteristics and dimensions for metal-sheath-type glow plugs

1 Scope

This document specifies the main properties and dimensions of metal-sheath-type glow plugs, including the terminals, and the dimensions of their cylinder head housings, for use with diesel (compression ignition) engines.

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 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 286-1, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 1: Basis of tolerances, deviations and fits*

ISO 965-1:2013, *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: Limit deviations for screw threads*

3 Terms and definitions

No terms and definitions are listed in this document.

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/

4 Dimensions and tolerances

4.1 Threads – dimension limits and tolerances

The threads of glow plugs and the corresponding tapped holes in cylinder heads shall be in accordance with ISO 68-1, ISO 261, ISO 965-1 and ISO 965-3.

The tolerance class 6g shall be used for glow-plug threads. For existing designs, tolerance class 6e is also permitted. New designs shall be to tolerance class 6g.

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