INTERNATIONAL STANDARD

ISO 17447-3

First edition
2015-05-15

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

Part 3: Tests and requirements

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

Partie 3: Essais et exigences

Reference number
ISO 17447-3:2015(E)

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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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 32, *Electrical and electronic components and general system aspects.*

ISO 17447 consists of the following parts, under the general title *Road Vehicles — Glow-plugs with conical seating and their cylinder head housing*:

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

— *Part 2: Basic characteristics and dimensions for ceramic-sheath-type glow-plugs*

— *Part 3: Tests and requirements*

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Introduction

The purpose of this International Standard is to provide a compact and concise specification on glow-plugs and their cylinder head housings, which is to 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. It is to 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.

ISO 17447-1 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 this part of ISO 17447.

It is intended to withdraw the following standards on glow-plugs and their cylinder head housing as soon as this part of ISO 17447 is published:

ISO 6550-1, ISO 6550-2, ISO 6550-3, ISO 6550-4, ISO 7578.

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

Part 3: Tests and requirements

1 Scope

This part of ISO 17447 specifies general requirements and test methods for sheath-type glow-plugs. Detailed test condition(s) and/or requirement(s) are agreed between the glow-plug manufacturers and the engine manufacturer. It is applicable to glow-plugs conforming to ISO 17447-1 and ISO 17447-2, used in diesel (compression ignition) engines.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-6, *Environmental testing — Part 2-6: Tests — Test Fc: Vibration (sinusoidal)*

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1
nominal voltage
voltage as marked on the housing of the glow-plug

Note 1 to entry: The nominal voltage of the glow-plug is generally not identical to the supply voltage of the vehicle's electrical system.

3.2
test voltage
voltage(s) applied to the glow-plug under test

4 Tests and general requirements

4.1 General

Detailed test condition(s) and/or requirement(s) are agreed between the glow-plug manufacturers and the engine manufacturer.

If not otherwise specified, all tests shall be carried out at room temperature (RT) (23 ± 5) °C.

4.2 Gas tightness

4.2.1 Test

Mount the sample on a test assembly with the tightening torque as specified in ISO 17447-1 and ISO 17447-2.

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