INTERNATIONAL STANDARD

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Diesel engines — Fuel injection pumps and fuel injector low-pressure connections —

Part 1: Threaded connections

Moteurs diesels — Raccords basse pression pour pompes d'injection de combustible et porte-injecteurs de combustible complets —

Partie 1: Raccords filetés

Reference number
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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 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 34, *Propulsion, powertrain, and powertrain fluids*.

This second edition cancels and replaces the first edition (ISO 13948-1:2000), which has been technically revised. The following changes have been made: the tables and figures have been revised.

ISO 13948 consists of the following parts, under the general title *Diesel engines — Fuel injection pumps and fuel injector low-pressure connections*:

— *Part 1: Threaded connections*

— *Part 2: Non-threaded (push-on) connections*

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Introduction

It is recognized that a large variety of low-pressure connections for fuel injection pumps and injectors exist, using different sealing principles as well as designs. ISO 13948 attempts to provide the user with a common set of preferred types.

ISO 13948 is divided into two parts, covering threaded connections (ISO 13948-1) and non-threaded (push-on) connections (ISO 13948-2) for use with low-pressure fuel supply and return, boost air pressure and lubricating oil supply and return.

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Diesel engines — Fuel injection pumps and fuel injector low-pressure connections —

Part 1: Threaded connections

1 Scope

This part of ISO 13948 specifies dimensions and requirements for mechanical, threaded connections used on diesel fuel injection pumps and fuel injectors for the connection of low-pressure fuel, lubrication oil or air supply.

Five types of threaded connections (types A to E) are described in this part of ISO 13948. Type A is commonly used for both pumps and injectors, while types B to E are for diesel fuel injection pumps only.

NOTE Low-pressure connections to fuel filters are covered in other International Standards; see the Bibliography. High-pressure end-connections for pumps and injectors are covered in ISO 2974

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.

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

ISO 4288, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*

ISO 6149-1, *Connections for hydraulic fluid power and general use — Ports and stud ends with ISO 261 metric threads and O-ring sealing — Part 1: Ports with truncated housing for O-ring seal*

ISO 7876-1, *Fuel injection equipment — Vocabulary — Part 1: Fuel injection pumps*

ISO 7876-2, *Fuel injection equipment — Vocabulary — Part 2: Fuel injectors*

ISO 7876-3, *Fuel injection equipment — Vocabulary — Part 3: Unit injectors*

ISO 7876-4, *Fuel injection equipment — Vocabulary — Part 4: High-pressure pipes and end-connections*

ISO 7876-5, *Fuel injection equipment — Vocabulary — Part 5: Common rail fuel injection system*

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this part of ISO 13948, the terms and definitions given in ISO 7876-1 to ISO 7876-5 apply.

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