International Standard

ISO 13948-2

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

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

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

Partie 2: Raccords non filetés (à pression)

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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 document 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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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 34, *Propulsion, powertrain and powertrain fluids*.

This fourth edition cancels and replaces the third edition (ISO 13948-2:2016), which has been technically revised.

The main changes are as follows:

— dimensional tolerances on forming parts were optimized;

— language inclusivity was improved.

A list of all parts in the ISO 13948 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

There is a large variety of low-pressure connections on fuel injection equipment. These connections use different sealing principles and designs. This document specifies a common set of preferred types.

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

Low-pressure connections to fuel filters are covered in ISO 7310, ISO 7311 and ISO 7654. High-pressure end-connections for pumps and injectors are covered in ISO 2974 and ISO 13296.

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

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

1 Scope

This document specifies requirements for the connection ends of push-on connections used with fuel injection equipment.

Three types of push-on connections (types A, B and C) are described in this document.

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 21920-3, *Geometrical product specifications (GPS) — Surface texture: Profile — Part 3: Specification operators*

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 Connection designs and applications

4.1 Type A: Nipple connections

Figure 1 gives an example of a nipple connection.

This design is intended for use directly with the mating hose (Figure 1, label 2) or in conjunction with a retaining clip around the hose (not shown) for a more secure connection.

The nipple (Figure 1, label 1) can be machined (see Figure 4), formed (see Figure 5 and Figure 6) or moulded (see Figure 7).

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