
**Diesel engines — Clamp mounted CR
fuel injectors — Mounting dimensions**

*Moteurs diesels — Injecteurs de combustible pour rampe commune
fixée par patte — Dimensions de montage*

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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 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 the following URL: www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces (ISO 12251:2011) which has been technically revised.

The main changes compared to the previous edition are as follows:

- surface specification has been referenced to ISO 1302;
- ISO 2974 has been added for the high pressure connector;
- large D and small d have been interchanged, corresponding to ISO 286-1 (large D for bores, small d for shafts);
- numbering D_1 to D_5 and d_1 to d_5 has been rearranged: same numbers now indicate same position within the assembly of injector and cylinder head;
- **Figure 5** has been completed in order to show the complete assembly and a new dimension D_3 and bore for capnut space have been added;
- D_4 has been corrected to 24,1 in **Table 2** at type A.5 (error in the first edition);
- **Table 3** has been changed: tolerances for d_3 changed to max. values and max. value for type B.2 changed from 19,1 to 19,2;
- dimension D_3 and bore for capnut space 19,3 mm have been introduced in **Table 4**;
- type B.6 has been added in **Table 3** and **Table 4**;
- Bibliography has been added.

Diesel engines — Clamp mounted CR fuel injectors — Mounting dimensions

1 Scope

This document specifies dimensional requirements for clamp mounted CR fuel injectors and their corresponding cylinder head features in diesel engines.

According to the injector nozzle capnut, the clamp mounted CR fuel injectors can be divided into two types:

- a) Type A, where the nozzle capnut is straight (see [Figure 4](#));
- b) Type B, where the nozzle capnut is stepped (see [Figure 5](#)).

Each clamp mounted CR fuel injector type is subdivided by a series of different sizes.

NOTE This differentiation corresponds to the relationship between the two guide diameters of the clamp mounted CR fuel injectors.

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 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ISO 2974, *Diesel engines — 60 female cones for high pressure fuel injection components*

3 Terms, definitions and symbols

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

For the purposes of this document, the following symbols apply:

d_1 injector upper guide diameter

d_2 injector shaft diameter

d_3 capnut diameter

d_4 injector lower guide diameter

d_5 injector nozzle shaft diameter

D_1 bore for upper guide diameter