INTERNATIONAL STANDARD

ISO 2698

Third edition 2013-05-15

Diesel engines — Clamp-mounted fuel injectors, types 7 and 28

Moteurs à allumage par compression — Porte-injecteurs de combustible complets à fixation par patte, types 7 et 28

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@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. www.iso.org/directives

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The committee responsible for this document is ISO/TC 22, Road vehicles, Subcommittee SC 7, Injection equipment and filters for use on road vehicles. NDARD PREVIEW

This third edition cancels and replaces the second edition (150 2698:1993), which has been technically revised.

Diesel engines — Clamp-mounted fuel injectors, types 7 and 28

1 Scope

This International Standard specifies dimensions necessary for the mounting of fuel injectors in diesel (compression-ignition) engines.

The location of the fuel inlet and leak-off connections, and the dimensions of the clamp are not defined since they vary according to the particular application.

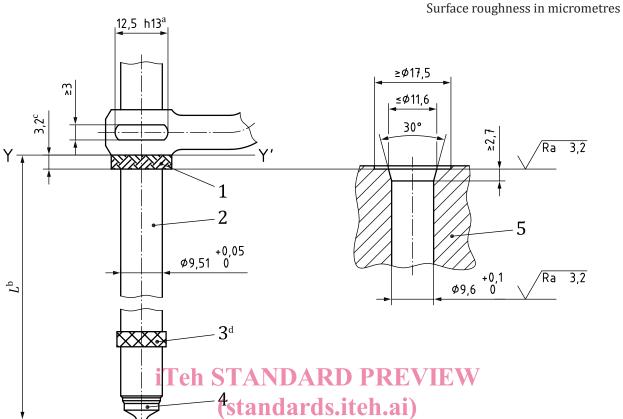
This International Standard applies to clamp-mounted injectors of types 7 and 28 made of an integral nozzle and nozzle holder design with a 9,5 mm (nominal) injector shank diameter.

2 Dimensions and tolerances

2.1 Injectors, types 7 and 28

Dimensions and tolerances of injectors of types 7 and 28 are given in Figures 1 and 2, respectively. IT eh STANDARD PREVIEW

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Dimensions in millimetres

Key

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sealing washer 1

- 2 nozzle holder
- 3 seal
- 4 nozzle
- engine 5
- а These flats are optional.
- b See <u>2.3</u>.
- With commercial tolerances (before compression). С
- d The outer diameter of the seal shall be chosen such that it provides appropriate sealing with the injector bore.

Figure 1 — Clamp-mounted injector, type 7

,12,5 h13^a ≥ø17,5 0.5×45° Υ 1 5 2 +0,07 3,2 Ø9,58 Ø9.51 Н 0,05 | H (M) Ζ SR0,25 \mathcal{B}^{d} 3,2 Ø5,08 → | ø0,1 (M) H (M) | https://standards.iteh.ai/catalog/standards/sist/1de92c09-de93 210a59f5f082/iso-2698-2013 Key

Dimensions in millimetres Surface roughness in micrometres

- 1 dust/water seal
- 2 nozzle holder
- 3 seal
- 4 nozzle
- 5 engine
- a These flats are optional.
- b See <u>2.3</u>.
- c With commercial tolerances (before compression).
- d This dimension determines the distance between the reference plane ZZ' and the point of intersection of the injection holes axes with the injector axis, when the sealing washer is compressed; it varies with nozzle sac design.

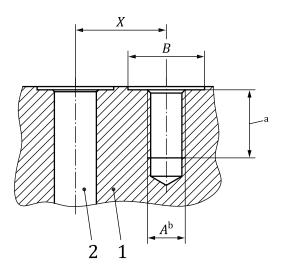
Figure 2 — Clamp-mounted injector, type 28

2.2 Clamp location

Dimensions and tolerances for the clamp location as related to the injector are given in Figure 3.

Dimension, *X*, and thread diameter, *A*, for the clamp fastener, as given in <u>Table 1</u>, are preferred values; they can vary with application, i.e. depending on cylinder head design.

Dimensions in millimetres



Key

- 1 engine
- 2 injector bore
- a Minimum length as required.
- b Clamp fastener thread.

Figure B — Clamp location for injectors, types 7 and 28 (standards.iteh.ai)

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Table 1 — Injector type X, A and B

Dimensions in millimetres

Injector type	X ±0,3	Aa nom.	Ø B min.	
7 and 20	18,4	M8 x 1,25	15,8	
7 and 28	25	M10 x 1,5	16,9	
For fasteners of property class 9,8.				

2.3 Preferred length *L*

The length, L, determines the distance between the reference plane YY' and the point of intersection of the injection holes axes with the injector axis (see <u>Figures 1</u> and <u>2</u>); it varies with the application, i.e. depending on the cylinder head design.

The dimensions and tolerances for the preferred length, L, are given in Table 2.

Table 2 — **Injector type** *L*

Dimensions in millimetres

Injector type	L ±0,3	
7 and 28	81,4	

3 Other specifications

Dimensions and requirements not given in this International Standard are left to the discretion of the manufacturer.

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