INTERNATIONAL STANDARD

ISO 2698

Second edition
1993-07-15

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

Reference number
ISO 2698:1993(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 2698 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Sub-Committee SC 7, *Injection equipment and filters for use on road vehicles*.

This second edition cancels and replaces the first edition (ISO 2698:1974), of which it constitutes a technical revision.

Annex A of this International Standard is for information only.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

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.

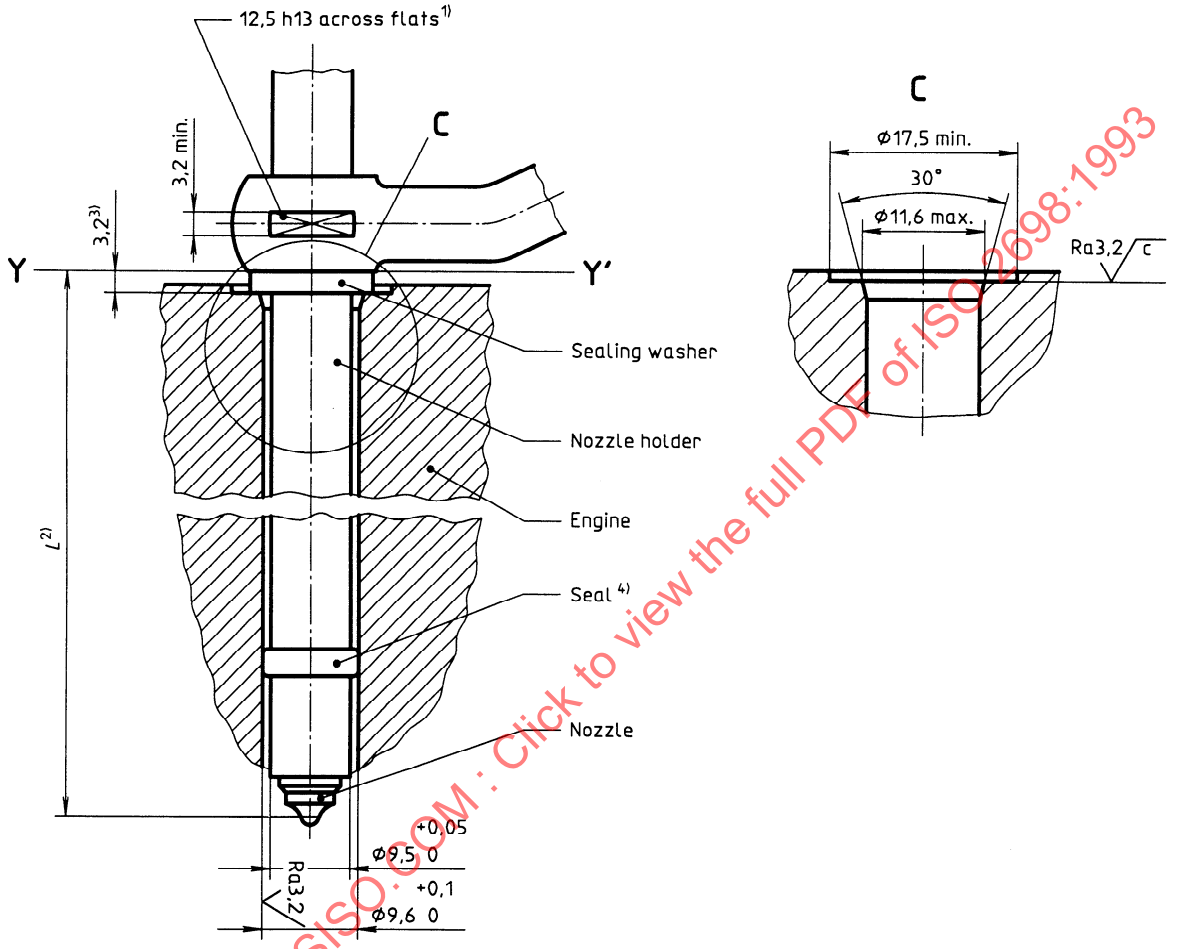
This International Standard applies to clamp-mounted injectors of types 7 and 28 made of an integral nozzle and nozzle holder design with a 9,5 mm (nominal) injector shank diameter.

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.

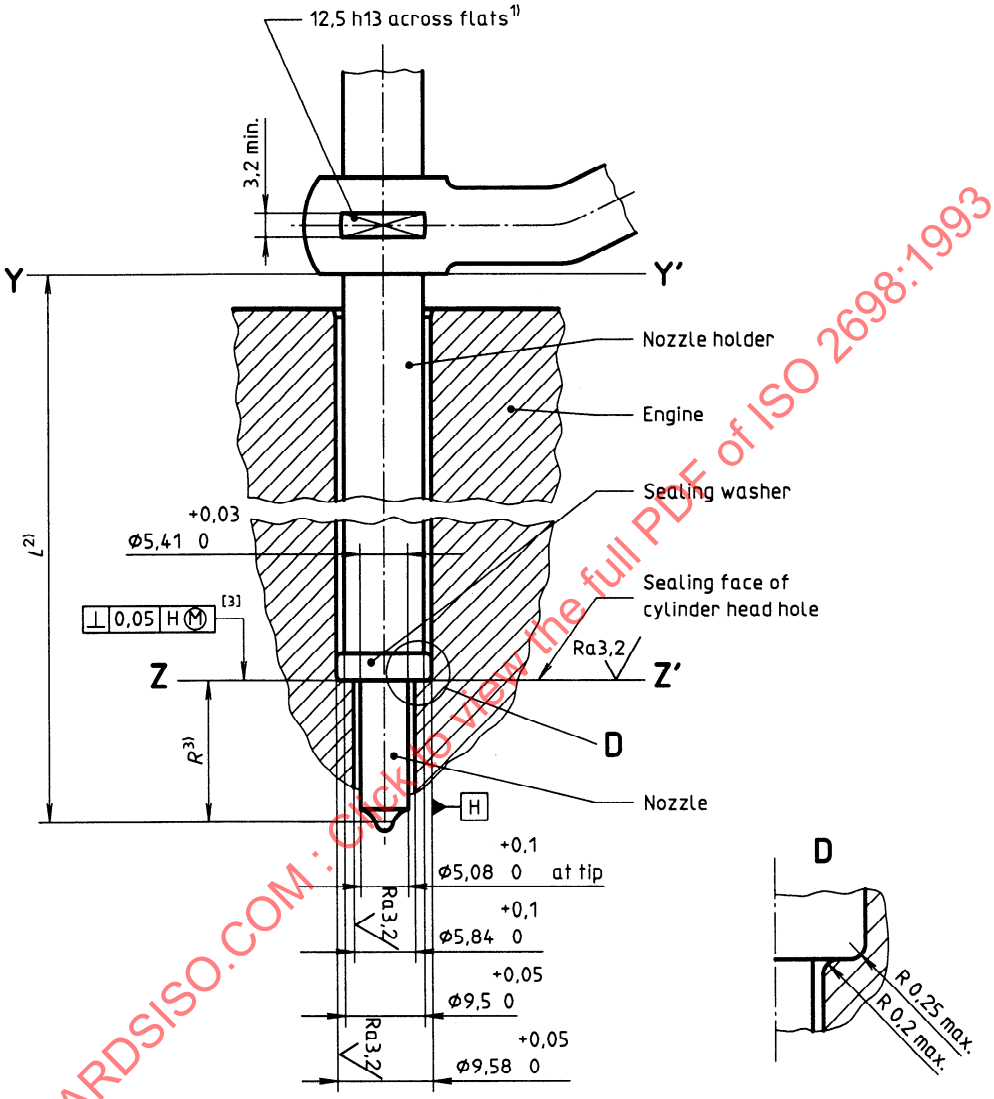
Dimensions in millimetres
Surface roughness values in micrometres[2]



1) These flats are optional.
2) See 2.3.
3) With commercial tolerances (before compression).
4) 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

Dimensions in millimetres
Surface roughness values in micrometres[2]



1) These flats are optional.
2) See 2.3.
3) 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.

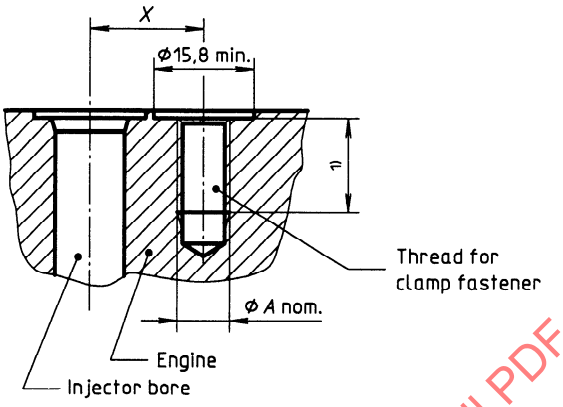
Figure 2 — Clamp-mounted injector, type 28

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 table 1, are preferred values; they may vary with application, i.e. depending on cylinder head design.

Dimensions in millimetres



1) Minimum length as required by design.

Figure 3 — Clamp location for injectors, types 7 and 28

Table 1

Dimensions in millimetres

Injector type	X ± 0,3	A [1] nom.
7 and 28	18,4	M8 × 1,25
	25	M10 × 1,5
1) For fasteners of property class 10.9[1].		

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 figures 1 and 2); it varies with application, i.e. depending on cylinder head design.

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

Table 2

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.

Annex A
(informative)

Bibliography

[1] ISO 898-1:1988, *Mechanical properties of fasteners — Part 1: Bolts, screws and studs.*

[2] ISO 1302:1992, *Technical drawings — Method of indicating surface texture.*

[3] ISO 2692:1988, *Technical drawings — Geometrical tolerancing — Maximum material principle.*

[4] ISO 7876-2:1991, *Fuel injection equipment — Vocabulary — Part 2: Fuel injectors.*

This page intentionally left blank