

INTERNATIONAL STANDARD

ISO
8984-2

Second edition
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Diesel engines — Testing of fuel injectors —

Part 2: Test methods

*Moteurs diesels — Essais des porte-injecteurs de combustible
complets*

Partie 2: Méthodes d'essai



Reference number
ISO 8984-2:1993(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 8984-2 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 7, *Injection equipment and filters for use on road vehicles*.

This second edition cancels and replaces the first edition (ISO 8984-2:1987), of which it constitutes an editorial revision.

ISO 8984 consists of the following parts, under the general title *Diesel engines — Testing of fuel injectors*:

- *Part 1: Hand-lever-operated testing and setting apparatus*
- *Part 2: Test methods*

Diesel engines — Testing of fuel injectors —

Part 2: Test methods

1 Scope

1.1 This part of ISO 8984 specifies tests which may be performed on fuel injectors for diesel (compression-ignition) engines, using hand-lever-operated testing and setting apparatus, as specified in ISO 8984-1.

These tests are

- nozzle opening pressure;
- chatter (atomization);
- spray pattern;
- seat leakage;
- back-leakage.

1.2 This part of ISO 8984 primarily applies to testing the injectors of fuel injection equipment for diesel (compression-ignition) engines requiring fuel delivery of up to 300 mm³/(injection × cylinder) at full load.

1.3 It is up to the injector manufacturer to specify which tests in this part of ISO 8984 are to be performed on a particular injector, together with the acceptable performance limits.

1.4 It is also up to the injector manufacturer to specify the adaptor which connects the injector to the apparatus (see 3.4), and any specific requirements not covered by this part of ISO 8984.

NOTE 1 The terms used in this part of ISO 8984 are in accordance with ISO 7876-2:1991, *Fuel injection equipment — Vocabulary — Part 2: Fuel injectors*.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8984. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8984 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4008-3:1987, *Road vehicles — Fuel injection pump testing — Part 3: Application and test procedures*.

ISO 4113:1988, *Road vehicles — Calibration fluid for diesel injection equipment*.

ISO 7440-1:1991, *Road vehicles — Fuel injection equipment testing — Part 1: Calibrating nozzle and holder assemblies*.