# INTERNATIONAL STANDARD

ISO 6626-3

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## Internal combustion engines — Piston rings —

Part 3:

## Coil-spring-loaded oil control rings made of steel

Moteurs à combustion interne — Segments de piston —

Partie 3: Segments racleurs régulateurs d'huile, en acier, mis en charge par ressort hélicoïdal



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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 Maison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 6626-3 was prepared by Technical Committee ISO/TC 22, Road vehicles.

ISO 6626 consists of the following parts, under the eneral title *Internal combustion engines* — *Piston rings*:

- Coil-spring-loaded oil control rings<sup>1)</sup>
- Part 2: Coil-spring-loaded oil control rings of narrow width made of cast iron
- Part 3: Coil-spring-loaded oil control rings made of steel

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<sup>1)</sup> ISO 6626:1989, published without a part number, is regarded as the first part of the ISO 6626 series since publication of the other parts.

#### Introduction

ISO 6626 is one of a series of International Standards dealing with piston rings for reciprocating internal combustion engines. Others are ISO 6621, ISO 6622, ISO 6623, ISO 6624, ISO 6625 and ISO 6627 (see Clause 2 and Bibliography).

The common features and dimensional tables presented in this part of ISO 6626 constitute a broad range of variables and, in selecting a particular ring type, the designer will bear in mind the conditions under which it will be required to operate.

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## Internal combustion engines — Piston rings —

### Part 3:

### Coil-spring-loaded oil control rings made of steel

#### 1 Scope

This part of ISO 6626 specifies the essential dimensions of coil-spring-loaded, nitrided oil control rings made of steel, of piston ring types SOR (with R-shaped groove) and SOV (with V-shaped groove).

This part of ISO 6626 applies to call-spring-loaded, nitrided oil control rings made of steel with a diameter of between 60 mm and 200 mm inclusive for reciprocating internal combustion engines. It can also be used for piston rings of compressors working under analogous conditions.

#### **Normative references** 2

The following referenced documents are indepensable for the application 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 6621-4, Internal combustion engines -Part 4: General specifications

#### **Symbols**

The following symbols are used in this part of ISO 6626.

ICE With the symbols used in ISO 6621, ISO 6622, These symbols (including associated indices) are in accordan ISO 6623, ISO 6624, ISO 6625, ISO 6627 and other parts of ISO 6626.

- radial wall thickness
- groove depth
- $a_{12}$  radial thickness over coil spring
- $a_{13}$  groove depth and bridge
- $a_{14}$  external land depth
- land spacing
- slot width
- nominal diameter (nominal bore diameter)
- coil-spring diameter