

INTERNATIONAL ISO  
STANDARD 5199

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## Technical specifications for centrifugal pumps — Class II

*Spécifications techniques pour pompes centrifuges — Classe II*



Reference number  
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 5199 was prepared by Technical Committee ISO/TC 115, *Pumps*, Subcommittee SC 1, *Dimensions and technical specifications of pumps*.

This second edition cancels and replaces the first edition (ISO 5199:1986), which has been technically revised.

Annexes A, C and D form a normative part of this International Standard. Annexes B, E, F, G and H are for information only.

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## Introduction

This International Standard is one of a set dealing with technical specifications of centrifugal pumps; they are designated as Classes I, II and III. Class I comprises the most severe and Class III the least severe requirements.

The selection of the class to be used is in accordance with the technical requirements for the application for which the pump is intended. The class chosen should be agreed between the purchaser and supplier. Furthermore, additional safety requirements concerning the field of application should be taken into account.

However, it is not possible to standardize the class of technical requirements for centrifugal pumps for a certain field of application, because each field of application comprises different requirements. All classes (I, II and III) can be used in accordance to the different requirements of the pump application. So it may happen that pumps built in accordance with Classes I, II and III may work beside one another in the one plant.

Further requirements covering specific applications or industries may be dealt with in separate standards.

Criteria for the selection of the required class of a pump for a certain application may include

- reliability,
- required operating life,
- operating conditions,
- environmental conditions, and
- local ambient conditions.

Cross-references in boldface and the checklist in annex H indicate where a decision may be required by the purchaser, or where agreement is required between the purchaser and the manufacturer/supplier.