

# INTERNATIONAL STANDARD

**ISO**  
**449**

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## **Ships and marine technology — Magnetic compasses, binnacles and azimuth reading devices — Class A**

*Navires et technologie maritime — Compas magnétiques, habitacles  
et alidades — Classe A*



Reference number  
ISO 449:1997(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 449 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 6, *Navigation*.

This second edition cancels and replaces the first edition (ISO 449:1979), which has been technically revised.

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# Ships and marine technology — Magnetic compasses, binnacles and azimuth reading devices — Class A

## 1 Scope

This International Standard gives general requirements regarding construction and performance for magnetic compasses, binnacles and azimuth reading devices, class A. According to the design of the ship, two types of binnacle are specified.

This International Standard applies to liquid-filled magnetic compasses:

- intended for sea navigation according to regulations in force;
- having a direct reading system;
- which may be of the reflecting, projecting or transmitting types.

In the context of this International Standard, a magnetic compass is an instrument consisting of a directional system supported by a single pivot inside a bowl which is completely filled with liquid, and which is supported in gimbals inside or outside the bowl. Compasses without gimbals are also covered by this International Standard. The requirements relating to gimbals do not apply to such compasses.

This International Standard does not apply to:

- a) dry card compasses;
- b) types of compass designed on principles different from those stated above or not complying with the descriptions given.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard 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 613:1982, *Shipbuilding — Magnetic compasses, binnacles and azimuth reading devices — Class B.*

ISO/R 694:1968, *Positioning of magnetic compasses in ships.*

ISO 1069:1973, *Magnetic compasses and binnacles for sea navigation — Vocabulary.*

ISO 2269:1992, *Shipbuilding — Class A magnetic compasses, azimuth reading devices and binnacles — Tests and certification.*