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**Ships and marine technology —  
Marine gyro-compasses**

*Navires et technologie maritime — Compas gyroscopiques à usage  
marin*



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Published in Switzerland

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 6, *Navigation and ship operations*.

This third edition cancels and replaces the second edition (ISO 8728:1997), which has been technically revised.

# Ships and marine technology — Marine gyro-compasses

## 1 Scope

This International Standard specifies the construction, performance, and type testing for *gyro-compasses required by Regulation 12 of Chapter V of SOLAS 1974* (as amended).

NOTE All requirements that are extracted from the recommendations of IMO Resolutions [Resolution A.424(XI) on performance standards for gyro-compasses] are printed in italics.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 25862, *Ships and marine technology — Marine magnetic compasses, binnacles and azimuth reading devices*

IEC 60945, *Maritime navigation and radiocommunication equipment and systems — General requirements — Methods of testing and required test results*

IEC 61162-1, *Maritime navigation and radiocommunication equipment and systems — Digital interfaces - Part 1: Single talker and multiple listeners*

IEC 61162-2, *Maritime navigation and radiocommunication equipment and systems — Digital interfaces — Part 2: Single talker and multiple listeners, high-speed transmission*

IEC 61924-2, *Maritime navigation and radiocommunication equipment and systems — Integrated Navigation Systems (INS) — Part 2: Modular structure for INS — Operational and performance requirements, methods of testing and required test results*

IMO Resolution MSC.252(83), *Performance standards for alert communications with an Integrated Navigation System*

IMO Resolution MSC.302(87), *Performance standards for bridge alert management*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **gyro-compass**

*complete equipment including all essential elements of the complete design, including both the gyro-compass as heading sensor and the associated heading transmission system*

### 3.2

#### **true heading**

*horizontal angle between the vertical plane passing through the true meridian and the vertical plane passing through the ship's fore-and-aft datum line; it is measured from true north (000°) clockwise through 360°*

Note 1 to entry: When the gyro-compass equipment is not installed on board ship, this "true heading" is regarded as the true heading of the lubber line. Where a gyro-compass has the facility of introducing a correction by moving the lubber line, the correction is set for the local latitude.