



**International
Standard**

ISO 8728

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

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

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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	3
5 Construction requirements	4
6 Performance requirements	5
6.1 Accuracy in latitudes up to 60°.....	5
6.1.1 Settling time.....	5
6.1.2 Settle point error.....	5
6.1.3 Settling time under operational conditions.....	5
6.1.4 Settle point error under general conditions.....	5
6.1.5 Residual error in correction.....	5
6.1.6 Effect of alteration of speed.....	5
6.1.7 Effect of alteration of course.....	5
6.1.8 Accuracy on a Scorsby table.....	5
6.1.9 Synchronization between the master compass and repeaters.....	6
6.2 Interface.....	6
6.3 Alert management.....	6
6.3.1 General.....	6
6.3.2 Power failure in the gyro-compass (“Power fail” alert).....	6
6.3.3 Malfunction of the gyro-compass system (“System fault” alert).....	7
7 Type tests	7
7.1 General.....	7
7.2 Settling time test.....	7
7.3 Settle point error test.....	7
7.4 Settle point heading repeatability test.....	7
7.5 Settling time on a Scorsby table.....	7
7.6 Scorsby test.....	8
7.7 Intercardinal motion test.....	8
7.8 Repeater accuracy test.....	8
7.9 Speed correction test.....	9
7.10 General requirement test.....	9
7.10.1 General.....	9
7.10.2 Voltage variation test.....	9
7.10.3 Frequency variation test.....	10
7.10.4 Vibration tests.....	10
7.10.5 Temperature test.....	11
7.10.6 Damp heat test.....	11
7.10.7 Other tests.....	11
7.11 Interface test.....	11
7.12 Alert management test.....	12
7.12.1 Basic test for alert management.....	12
7.12.2 “Power fail” alert or output of a status signal on the EUT power.....	12
7.12.3 “System fault” alert.....	12
8 Marking	12
9 Information	12
Annex A (normative) Requirements for ship surveyors for the installation of gyro-compasses and repeater compasses on board ships	13

Annex B (normative) Alerts definition for gyro-compasses	14
Annex C (normative) IEC 61162 interfaces for VDR and other external equipment	15
Bibliography	17

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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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 6, *Navigation and ship operations*.

This fourth edition cancels and replaces the third edition (ISO 8728:2014), which has been technically revised.

The main changes are as follows:

- [Clause 4](#) (abbreviated terms) has been added;
- in [6.3](#), requirements related to bridge alert management have been added;
- in [7.1](#), a requirement for display equipment has been added;
- in [7.12](#), test method for requirements related to bridge alert management has been added;
- in [Annex B](#), the equivalent requirements in this document and IMO Resolution have been deleted and the alerts with a standard alert identifier have been defined;
- in [Annex C](#), IEC 61162 interfaces overview has been added;
- the normative references and bibliography have been updated.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is aligned with IMO Resolution A.424(XI) on performance standards for gyro-compasses.

Any text in this document which is a citation from the IMO Resolution A.424(XI), appears in italics. Within these citations, any changes to the original wording of the IMO Resolution A.424(XI) are written in upright font.

In this document, the following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.

Ships and marine technology — Marine gyro-compasses

1 Scope

This document specifies the construction, performance, and type testing for gyro-compasses which are required by the International Convention for the Safety of Life at Sea (SOLAS), 1974 (as amended), Chapter V, Regulation 19.

This document specifies the minimum requirements, the construction, performance, and type testing for gyro-compasses, which required to comply with the performance standards adopted by the IMO Resolution A.424(XI).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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

IEC 61162-1, *Marine 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 61162-450, *Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection*

IEC 62288, *Maritime navigation and radiocommunication equipment and systems — Presentation of navigation-related information on shipborne navigational displays — General requirements, methods of testing and required test results*

IEC 62923-1:2018, *Maritime navigation and radiocommunication equipment and systems — Bridge alert management — Part 1: Operational and performance requirements, methods of testing and required test results*

IEC 62923-2, *Maritime navigation and radiocommunication equipment and systems — Bridge alert management — Part 2: Alert and cluster identifiers and other additional features*

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

IMO Resolution MSC 191(79), *Performance standards for the presentation of navigation-related information on shipborne navigational displays*

IMO Resolution MSC 466(101), *Amendments to the performance standards for the presentation of navigation-related information on shipborne navigational displays (Resolution MSC.191(79))*

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>