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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 4300-2025

Replacing GB/T 4300-2007

Ships and marine technology - Marine gyro-compasses

船舶与海洋技术 船用陀螺罗经

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 4300-2007 "Ships and marine technology". Compared with GB/T 4300-2007, except In addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Added the terms "sub-compass", "bridge alarm management", "central alarm management system" and corresponding definitions (see 3.7, 3.15, 3.16);

--- Added abbreviation description (see Chapter 4);

--- Added interface requirements and test methods for gyrocompass (see 6.2, 7.11);

--- Added gyrocompass alarm management requirements and test methods (see 6.3, 7.12);

--- Added gyrocompass display equipment requirements and test methods (see 6.3, 7.1);

--- Increased the scope of application of the rain test. only the rain test is performed on outdoor equipment (see 7.10.7);

--- Increased the scope of application of mechanical noise test. only the equipment to be installed in the cab and the wings of the bridge shall be tested for mechanical noise. Test (see 7.10.7);

--- Added "Gyrocompass alarm definition" (see Appendix B);

--- Added "IEC 61162 interface between gyrocompass and VDR and other external devices" (see Appendix C).

This document is equivalent to ISO 8728:2024 "Ships and marine technology - Gyrocompasses for ships".

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1 Scope

This document specifies the structure of the gyrocompass in accordance with the requirements of Regulation 19 of Chapter V of the International Convention for the Safety of Life at Sea, 1974 (as amended). Structure, performance and type tests.

This article applies to marine gyrocompasses used within 60° north and south latitudes.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

IEC 60945 Maritime navigation and radiocommunication equipment and systems - General requirements, test methods and required test results

Note: GB/T 15868-1995 Global Maritime Distress and Safety System (CMDSS) General requirements and test methods for marine radio equipment and maritime navigation equipment and required test results (IEC 60945:1994, IDT).

IEC 61162-1 Digital interfaces for maritime navigation and radiocommunication equipment and systems Part 1: Single transmitter and multiple receivers

IEC 61162-2 Digital interfaces for maritime navigation and radiocommunication equipment and systems Part 2: Single transmitter and multiple receivers

Note: GB/T 31843.2-2019 Digital interfaces for maritime navigation and radiocommunication equipment and systems Part 2: Single transmitter and multiple receiver high High-speed transmission (IEC 61162-2:1998, IDT).

IEC 61162-450 Digital interfaces for maritime navigation and radiocommunication equipment and systems Part 450: Multiple transmitters and multiple receivers

Note: GB/T 31843.450-2019 Digital interfaces for maritime navigation and radiocommunication equipment and systems Part 450: Multiple transmitters and multiple receivers Ethernet connection (IEC 61162-450:2018, IDT).

IEC 62288 Maritime navigation and radiocommunication equipment and systems - General purpose - Display of navigation-related information on shipborne navigation displays

IEC 62923-1:2018 Maritime navigation and radiocommunication equipment and systems - Bridge alarm management - Part 1: Operation and performance

IEC 62923-2 Maritime navigation and radiocommunication equipment and systems - Bridge

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alarm management - Part 2: Alarm and group identifiers

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