

ICS 47.020.30
CCS U 55



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 47249-2026

**Ships and marine technology - Design requirements for
international ballast water transfer connection flange**

船舶与海洋技术 压载水转运连接国际通用法兰设计要求

(English Translation)

Issued on: March 31, 2026

Implemented on: July 1, 2026

Issued by: State Administration for Market Regulation

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document adopts ISO 23055:2020 "Design requirements for internationally recognized flanges for ballast water transfer connections in marine and marine technology".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Marine Machinery (SAC/TC137).

1 Scope

This document specifies the materials and specifications for internationally accepted flanges used in ballast water transfer connections between ships and shore-based receiving facilities, or between ships.

Equipment, process, dimensions, markings, quality assurance, ordering information and installation.

This document does not cover any modifications to the ship's ballast water piping system for connecting to shore facilities (e.g., from the ship's bottom machinery space).

Piping configuration to the main deck transport area.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

Flanges that are installed on ships and onshore ballast water transfer systems and have standardized dimensions for easy global connection.

The maximum pressure that piping system fittings can withstand, determined based on materials, thickness, and design calculations.

4 Abbreviations

The following abbreviations apply to this document.

DN. Nominal size

PN. Nominal Pressure

5.1 General Rules

The internationally accepted flanges for ballast water transfer systems should be flat flanges, made of steel or equivalent material. The flange should be compatible with the flanges it is installed on.

The piping system is electrochemically compatible. All other components of the system should be made of materials compatible with the system. Fasteners should be compatible with the flanges.

The material is a corrosion-resistant material with electrochemical compatibility.

The design and manufacture of flanges shall conform to the dimensional specifications in Chapter 7.