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

GB/T 36217-2025

Replacing GB/T 36217-2018

**Ships and marine technology - Ship's mooring and towing
fittings - Universal fairleads with upper roller**

船舶与海上技术 船舶系泊和拖带设备 带上滚柱导缆器

(English Translation)

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Table of Contents

Preface	
1 Scope	
2 Normative references	
3 Terms and Definitions	
4 Categories	
4.1 Type	
4.2 Nominal size	
5 Size	
6 Materials	
7 Structure	
8 Manufacturing and Inspection	
9 Sign	
Appendix A (Normative) Strength verification criteria for roller fairleads	
A.1 General requirements	
A.2 Load	
A.3 Load and stress criteria	
A.4 Wear allowance and corrosion allowance	
Appendix NA (Informative) Mark	
Reference	

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 36217-2018 "Ships and marine technology - Roller fairleads for ship mooring and towing equipment" and Compared with GB/T 36217-2018, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The definition of safe working load (SWL) has been changed (see 3.1, 3.1 of the 2018 edition);
- b) The weight with roller fairlead and the description of safe working load have been changed (see Tables 2 and 4, Tables 1 and Table 2);

- c) The values of parameter t in the vertical roller, lower horizontal roller and upper horizontal roller have been changed (see Table 5, Table 3 of the 2018 edition);
- d) Added the thickness values of bushings and washers (see Table 5);
- e) The parameters of the roller shaft have been changed (see Table 6, Table 4 of the 2018 edition);
- f) Added technical guidance on the selection of mooring accessories and mooring ropes, and tensile strength requirements (see 7.3 and 7.4);
- g) The dimension line theta 1 of the vertical load has been changed (see Figure A.2, Figure A.2 of the 2018 edition);
- h) The requirements for load and stress criteria have been changed (see A.3, Figure A.3 of the 2018 edition);
- i) added technical information on finite element and strength calculations (see A.3.2 and A.3.3);
- j) The requirements for wear allowance and corrosion allowance have been changed (see A.4, A.4 of the 2018 edition).

This document is equivalent to ISO 13733:2020 "Ships and marine technology - Ship's mooring and towing equipment with roller fairleads". The following minimal editorial changes were made to this document.

--- Added the content of safe working load (SWL) marking (see 9.3);

--- Added Appendix NA (informative).

1 Scope

This document specifies the classification, nominal size, dimensions and materials, as well as the structure, Manufacturing and marking requirements.

2 Normative references

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

Only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document. document. mooringequipment)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 safe working load

safeworkingload; SWL Safe load limits (maximum permissible loads) of mooring parts used in mooring and towing arrangements.

4.1 Type

The fairleads can be divided into the following four types according to their structure.

- a) Type 4R. with one cable hole;
- b) Type 5RL - with a cable hole and a guide roller on the left side;
- c) 5RR type - with a cable hole and a guide roller on the right side;
- d) Type 7R. with two cable holes.

4.2 Nominal dimensions

The nominal size D_n of the fairlead is expressed in millimeters as the outer diameter of the main roller, defined from some basic and preferred outer diameters.

Roller fairleads of the same outside diameter are marked with 4R, 5RL, 5RR or 7R and the nominal size is given. Fairleads for different SWL.

The nominal sizes are. 140, 160, 180, 200, 250, 300A, 300B, 400A, 400B and 400C.