International Standard

ISO 18824

Ships and marine technology — Ship's mooring and towing fittings — Horizontal roller fairleads

First edition
2024-09

Reference number
ISO 18824:2024(en)

© ISO 2024



COPYRIGHT PROTECTED DOCUMENT

© ISO 2024
All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **iv**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Nominal sizes **1**
5 Structure and dimension **1**
6 Materials **3**
7 Construction **3**
8 Manufacturing and inspection **4**
9 Marking **4**
Annex A (informative) **Basis for strength assessment of horizontal roller fairleads** **5**
Bibliography **6**

© ISO 2024 – All rights reserved

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.

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

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 4, *Outfitting and deck machinery.*

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.

© ISO 2024 – All rights reserved

Ships and marine technology — Ship's mooring and towing fittings — Horizontal roller fairleads

1 Scope

This document specifies the design, size and technical requirements for horizontal roller fairleads installed to brace the mooring rope over other obstacle fittings.

This document is applicable to the design, manufacture and inspection of horizontal roller fairleads.

2 Normative references

There are no normative references in this document.

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

— IEC Electropedia: available at https://www.electropedia.org/

3.1
safe working load
SWL
maximum load applied on the rope in service conditions

Note 1 to entry: The SWL is expressed in tonnes (1 t = 9,8kN).

3.2
horizontal roller fairlead
type of mooring fitting installed on board a ship to brace the mooring rope over other obstacle fittings

4 Nominal sizes

The nominal sizes, D_n, of horizontal roller fairleads are denoted by reference to the nominal diameter. The length, L, of horizontal roller fairleads are expressed in millimetres.

The typical nominal sizes, defined together as $D_n \times L$, are expressed in millimetres:

200 × 600, 200 × 800, 250 × 800, 250 × 1 000, 250 × 1 200.

5 Structure and dimension

Figure 1 shows the structure and dimension of horizontal roller fairleads. Table 1 shows the main parameters of horizontal roller fairleads.

© ISO 2024 – All rights reserved