BS EN ISO 10592:2022

BSI Standards Publication

Small craft — Remote hydraulic steering systems

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National foreword

This British Standard is the UK implementation of EN ISO 10592:2022. It is identical to ISO 10592:2022. It supersedes BS EN ISO 10592:2017, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GME/33, Small craft.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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Amendments/corrigenda issued since publication

Date	Text affected

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 10592

July 2022

ICS 47.080

Supersedes EN ISO 10592:2017

English Version

Small craft - Remote hydraulic steering systems (ISO 10592:2022)

Petits navires - Système de direction hydraulique commandé à distance (ISO 10592:2022)

Kleine Wasserfahrzeuge - Hydraulische Steueranlagen (ISO 10592:2022)

This European Standard was approved by CEN on 3 May 2021.

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European foreword

This document (EN ISO 10592:2022) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with Technical Committee CEN/TC 464 “Small Craft” the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 10592:2017.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10592:2022 has been approved by CEN as EN ISO 10592:2022 without any modification.

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Annex ZA
(informative)

Relationship between this European Standard and the essential requirements of Directive 2013/53/EU aimed to be covered

This European Standard has been prepared under a Commission standardization request M/542/C(2015) 8736 final to provide one voluntary means of conforming to essential requirements of Directive 2013/53/EU.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Annex I of Directive 2013/53/EU

Essential Requirements of Directive 2013/53/EU	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Annex I, Clause 5.4.1, Steering system, general.	4, 5, 6, 7, 8, 9 and 11	This standard specifies the requirements for remote hydraulic steering systems from the helm up to and including the output device connection point. This standard does not address propulsion control systems This standard does not address an emergency mean of steering.
Annex I, Clause 2.5, Owner's Manual	10	
Annex II, Components of watercraft (3) Steering wheels, steering mechanisms and cable assemblies.	4, 5, 7, 9.3 and 11	In respect of hydraulic steering mechanisms supplied as components only. Steering wheels and cable assemblies supplied as components are excluded from this standard.

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 188, *Small craft*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 464, *Small craft*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10592:1994), which has been technically revised.

The main changes are as follows:

— in Clause 3, definitions have been updated;

— throughout the text, requirements have been updated to meet the state of the art;

— the steering wheel requirements and tests have been removed;

— former Clause 12, Designation, has been removed.

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.

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Small craft — Remote hydraulic steering systems

1 Scope

This document specifies the requirements for the design, installation and testing of engine-mounted and craft-mounted remote hydraulic steering systems used with single and multiple engine installations of outboard engines over 15 kW per engine, as well as with single and multiple engines of inboard, sterndrive, and water jet drives, all used on small craft.

This document does not address emergency means of steering the craft.

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.

ISO 8848:2022, *Small craft — Remote mechanical steering systems*

ISO 12217-1:2015, *Small craft — Stability and buoyancy assessment and categorization — Part 1: Non-sailing boats of hull length greater than or equal to 6 m*

ISO 12217-2:2015, *Small craft — Stability and buoyancy assessment and categorization — Part 2: Sailing boats of hull length greater than or equal to 6 m*

ISO 12217-3:2015, *Small craft — Stability and buoyancy assessment and categorization — Part 3: Boats of hull length less than 6 m*

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
burst pressure
pressure at which the system exceeds the ultimate strength of the weakest hydraulic component, resulting in a drop of hydraulic pressure

3.2
component interface
mechanical interface (3.4) or *hydraulic interface* (3.3) at a point in the *steering system* (3.14) where a connection is made between components that are not supplied as part of the same assembly kit

Note 1 to entry: If hydraulic fluid lines are not shipped as part of the steering kit, there is an interface between the helm and the fluid lines, and between the *output device* (3.12) and the fluid lines.

3.3
hydraulic interface
interface between two or more hydraulic components where force and motion are transmitted by hydraulic fluid

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