

Irish Standard I.S. EN ISO 25197:2018

Small craft - Electrical/electronic control systems for steering, shift and throttle (ISO 25197:2012, including Amd 1:2014)

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#### I.S. EN ISO 25197:2018

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### National Foreword

I.S. EN ISO 25197:2018 is the adopted Irish version of the European Document EN ISO 25197:2018, Small craft - Electrical/electronic control systems for steering, shift and throttle (ISO 25197:2012, including Amd 1:2014)

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**EUROPEAN STANDARD** 

**EN ISO 25197** 

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

September 2018

ICS 47.080

Supersedes EN ISO 25197:2012

### **English Version**

# Small craft - Electrical/electronic control systems for steering, shift and throttle (ISO 25197:2012, including Amd 1:2014)

Petits navires - Systèmes électriques/électroniques pour le contrôle de la direction, de l'inverseur et des gaz (ISO 25197:2012, y compris Amd 1:2014) Kleine Wasserfahrzeuge - Elektrische/elektronische Regelungssysteme für Steuerung, Schaltung und Antrieb (ISO 25197:2012, einschließlich Amd 1:2014)

This European Standard was approved by CEN on 16 April 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN ISO 25197:2018(E)

### **European foreword**

The text of ISO 25197:2012, including Amd 1:2014 has been prepared by Technical Committee ISO/TC 188 "Small craft" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 25197:2018.

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 March 2019, and conflicting national standards shall be withdrawn at the latest by March 2019.

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 25197:2012.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2013/53/EU.

For relationship with EU Directive 2013/53/EU, see informative Annex ZA, which is an integral part of this document.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### **Endorsement notice**

The text of ISO 25197:2012, including Amd 1:2014 has been approved by CEN as EN ISO 25197:2018 without any modification.

### 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's 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 and Annex II of Directive 2013/53/EU

Essential Requirements of Directive 2013/53/EU	Clause(s)/sub- clause(s) of this EN	Remarks/Notes
Annex I, Part A, 5.4 - Steering systems.	Clauses 4 to 11 inclusive	In respect of requirements for the design, construction and testing of electrical/electronic steering, shift and throttle and dynamic position control systems, or combinations thereof.
Emergency control	9.1.4	
Annex I, Part A, 2.5 – Owner's Manual	4.7, 7.2, 8.3, 12	
Annex II (3) - Steering wheels, steering mechanisms and cable assemblies	Clauses 4 to 11 inclusive	In respect of electric/electronic control systems that can steer a watercraft only.

**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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## INTERNATIONAL STANDARD

ISO 25197

First edition 2012-12-01

## Small craft — Electrical/electronic control systems for steering, shift and throttle

Petits navires — Systèmes électriques/électroniques pour le contrôle de la direction, de l'inverseur et des gaz



Reference number ISO 25197:2012(E)

ISO 25197:2012(E)



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ISO 25197:2012(E)

### **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 25197 was prepared by Technical Committee ISO/TC 188, Small craft.

## Small craft — Electrical/electronic control systems for steering, shift and throttle

### 1 Scope

This International Standard establishes the requirements for design, construction and testing of electrical/electronic steering, shift and throttle and dynamic position control systems, or combinations thereof, on small craft of up to 24 m length of hull.

### 2 Normative references

The following referenced documents are indispensable for the application 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 8846, Small craft — Electrical devices — Protection against ignition of surrounding flammable gases.

ISO 8848, Small craft — Remote steering systems

ISO 10133, Small craft — Electrical systems — Extra-low-voltage d.c. installations

ISO 10240, Small craft — Owner's manual

ISO 10592, Small craft — Hydraulic steering systems

ISO 11591, Small craft, engine-driven — Field of vision from helm position

ISO 12215-8, Small craft — Hull construction and scantlings — Part 8: Rudders

ISO 13297, Small craft — Electrical systems — Alternating current installations

ISO 16750-2:2010, Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 2: Electrical loads

ISO 16750-3:2007, Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 3: Mechanical loads

ISO 16750-4, Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 4: Climatic loads

IEC 60068-2-27, Environmental testing — Part 2-27: Tests — Test Ea and guidance: Shock

IEC 60068-2-52, Environmental testing — Part 2-52: Tests — Test Kb: Salt mist, cyclic (sodium chloride solution)

IEC 60092-507, Electrical installations in ships — Part 507: Small vessels

IEC 60533:1999, Electrical and electronic installations in ships — Electromagnetic compatibility

IEC 60945:2002, Maritime navigation and radiocommunication equipment and systems — General requirements — Methods of testing and required test results

IEC 61000-4-5, Electromagnetic compatibility (EMC) — Part 4-5: Testing and measurement techniques — Surge immunity test

IEC 61508 (all parts), Functional safety of electrical/electronic/programmable electronic safety-related systems



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