

Irish Standard I.S. EN ISO 25197:2012&A1:2014

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

© CEN 2014 No copying without NSAI permission except as permitted by copyright law.

I.S. EN ISO 25197:2012&A1:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN ISO 25197:2012/A1:2014

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on: EN ISO 25197:2012 *Published:* 2012-12-01

This document was published		ICS number:			
under the authority of the NSAI and comes into effect on:		47.080			
2014-12-30					
		NOTE: If blank see CEN/CENELEC cover page			
[
NSAI	T +353 1	1 807 3800 Sales:			
1 Swift Square,	F +353 1	1 807 3838 T +353 1 857 6730			
Northwood, Santry	E standa	ards@nsai.ie F +353 1 857 6729			
Dublin 9	W NSAI.i	.ie W standards.ie			
Údarás um Chaighdeáin Náisiúnta na hÉireann					

EUROPEAN STANDARD NORME EUROPÉENNE

EN ISO 25197:2012/A1

EUROPÄISCHE NORM

December 2014

ICS 47.080

English Version

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

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

This amendment A1 modifies the European Standard EN ISO 25197:2012; it was approved by CEN on 18 October 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2014 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 25197:2012/A1:2014 E

This is a free page sample. Access the full version online. I.S. EN ISO 25197:2012&A1:2014

EN ISO 25197:2012/A1:2014 (E)

Contents	Page
Foreword	

This is a free page sample. Access the full version online. I.S. EN ISO 25197:2012&A1:2014

Foreword

This document (EN ISO 25197:2012/A1:2014) has been prepared by Technical Committee ISO/TC 188 "Small craft".

This Amendment to the European Standard EN ISO 25197:2012 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

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

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(s).

For relationship with EU Directive(s), see informative Annex ZA in EN ISO 25197:2012.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 25197:2012/Amd 1:2014 has been approved by CEN as EN ISO 25197:2012/A1:2014 without any modification.

EUROPEAN STANDARD

EN ISO 25197

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2012

ICS 47.080

English Version

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

Petits navires - Systèmes électriques/électroniques pour le contrôle de la direction, de l'inverseur et des gaz (ISO 25197:2012)

Kleine Wasserfahrzeuge - Elektrisches/elektronisches Regelungssystem für Steuerung, Schaltung und Antrieb (ISO 25197:2012)

This European Standard was approved by CEN on 24 November 2012.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

This is a free page sample. Access the full version online. I.S. EN ISO 25197:2012&A1:2014

Contents	Page
Foreword	3
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/25/EC as amended by Directive 2003/44/EC	4

Foreword

This document (EN ISO 25197:2012) has been prepared by Technical Committee ISO/TC 188 "Small craft".

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 June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

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

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(s).

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

According to the CEN/CENELEC Internal Regulations, the national standards organisations 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 25197:2012 has been approved by CEN as a EN ISO 25197:2012 without any modification.

This is a free page sample. Access the full version online. I.S. EN ISO 25197:2012&A1:2014

Annex ZA

(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 94/25/EC as amended by Directive 2003/44/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission to provide one means of conforming to Essential Requirements of the New Approach Directive 94/25/EC as amended by Directive 2003/44/EC.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one member state, 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 relevant Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and EU Directives

Clauses/subclauses of this European Standard	Corresponding annexes/paragraphs of Directive 94/25/EC as amended by Directive 2003/44/EC	Comments
All	Annex I.A.2, Clause 5.4, Steering system	

WARNING: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

This is a free page sample. Access the full version online. I.S. EN ISO 25197:2012&A1:2014 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)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org Published in Switzerland

Page

Contents

Forewo	ord	iv
1	Scope	. 1
2	Normative references	. 1
3	Terms and definitions	. 2
4	General requirements	. 4
5	Control head	. 5
6	Command station transfer	. 6
7	Portable helm station controls	
8	Dynamic-positioning system (DPS)	
9	Failure modes and responses	
9.1	Loss of operation	. 8
9.2	Loss of computer command logic	. 8
10	Test requirements	
10.1 10.2	General test requirements	
10.2	Joystick	
10.4	Control lever, single or combined, shift and throttle	
10.5	Environmental-test requirements	11
10.6	Vibration tests and requirements	
10.7	Shock testing	
10.8 10.9	Free fall. Resistance to UV	
10.9	Electromagnetic compatibility (EMC)	
10.10	Compass safe distance	
10.12	Insulation resistance	
11	Labelling	
12	Instructions to be included with the owner's manual	18

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



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation