

ISO 11105:2020



EN ISO 11105:2020

NBN EN ISO 11105:2020



Small craft - Ventilation of petrol engine and/or petrol tank compartments (ISO 11105:2020)

Valid from 29-04-2020

Replaces NBN EN ISO 11105:2017

ICS: 47.080

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 11105

April 2020

ICS 47.080

Supersedes EN ISO 11105:2017

English Version

Small craft - Ventilation of petrol engine and/or petrol tank compartments (ISO 11105:2020)

Petits navires - Ventilation des compartiments
contenant des moteurs à essence et/ou des réservoirs
à essence (ISO 11105:2020)

Kleine Wasserfahrzeuge - Belüftung von Räumen mit
Ottomotoren und/oder Benzintanks (ISO 11105:2020)

This European Standard was approved by CEN on 14 February 2020.

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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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 11105:2020) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with CCMC.

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of an identical text or by endorsement, at the latest by October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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 11105:2017.

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 the 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 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 11105:2020 has been approved by CEN as EN ISO 11105:2020 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 of Directive 2013/53/EU

Essential Requirements of Directive 2013/53/EU	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Annex I.A.2.5 - Owner's manual	7	
Annex I.A.5.1.2 – Installation requirements, ventilation of engine compartments	1, 2, 3, 4, 5, 6	These clauses of this standard address the ventilation requirements for petrol engine compartments only. They do not address the risk of downflooding and sinking through ventilation fittings as required by Annex I.A.3.5 (b) – Flooding.
Annex I.A.5.2.2 – Fuel system, fuel tanks	1, 2, 3, 4, 5,	These clauses of this standard address the ventilation requirements for petrol tank fuel tank spaces 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.

INTERNATIONAL STANDARD

**ISO
11105**

Third edition
2020-03

Small craft — Ventilation of petrol engine and/or petrol tank compartments

*Petits navires — Ventilation des compartiments contenant des
moteurs à essence et/ou des réservoirs à essence*



Reference number
ISO 11105:2020(E)

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Published in Switzerland

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ISO 11105:2020(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.

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*.

This third edition cancels and replaces the second edition (ISO 11105:1997), which has been technically revised.

The main changes compared to the previous edition are as follows:

- definitions have been added under [Clause 3](#);
- several clauses of the standard have been re-organized for clarity;
- [subclauses 4.4, 4.6, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 6.2, 6.4, 6.6, 6.7, 6.8](#) and [6.9](#) have been added;
- [subclauses 4.1, 4.2, 4.5, 4.7, 5.1, 5.2, 6.3, 6.10](#) have been amended;
- [Table 2](#) has been added;
- [Annex A](#) has been added.

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.

Small craft — Ventilation of petrol engine and/or petrol tank compartments

IMPORTANT — The colours represented in the electronic file of this document can be neither viewed on screen nor printed as true representations. For the purposes of colour matching, see ISO 3864-4 which provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.

1 Scope

This document specifies requirements for the ventilation of petrol engine and petrol tank compartments in small craft having petrol engines for propulsion, electrical generation or mechanical power, to prevent the accumulation of explosive gases in these compartments. Personal watercraft are not covered in this document.

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 8846:1990, *Small craft — Electrical devices — Protection against ignition of surrounding flammable gases*

ISO 11192:2005, *Small craft — Graphical symbols*

ISO 10088:2013, *Small craft — Permanently installed fuel systems*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <http://www.electropedia.org/>

3.1

habitable space

space surrounded by permanent structure in which there is provision for any of the following activities: sleeping, cooking, eating, washing/toilet, navigation, steering

Note 1 to entry: Spaces intended exclusively for storage, open cockpits with or without canvas enclosures and engine rooms are not included.

3.2

net compartment volume

volume that results from subtracting the volume of the *permanently installed* (3.4) items of equipment and accessories from the total, or gross, compartment volume

3.3

open to the atmosphere

<compartment or space> having at least 0,34 m² of permanent open area directly exposed to the atmosphere for each cubic meter of *net compartment volume* (3.2)