VÄIKELAEVAD. PÜSIPAIGALDATUD BENSIINI- JA DIISLIKÜTUSE PAAGID

Small craft - Permanently installed petrol and diesel fuel tanks (ISO 21487:2022)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 21487:2023 sisaldab Euroopa standardi EN ISO 21487:2023 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 21487:2023 consists of the English text of the European standard EN ISO 21487:2023.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.03.2023.	Date of Availability of the European standard is 15.03.2023.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 47.080

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 21487

March 2023

ICS 47.080

Supersedes EN ISO 21487:2018

English Version

Small craft - Permanently installed petrol and diesel fuel tanks (ISO 21487:2022)

Petits navires - Réservoirs à carburant essence et diesel installés à demeure (ISO 21487:2022)

Kleine Wasserfahrzeuge - Fest eingebaute Ottokraftstoff- und Dieselkraftstofftanks (ISO 21487:2022)

This European Standard was approved by CEN on 18 January 2023.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 29 March 2023.

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

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

Ref. No. EN ISO 21487:2023 E

European foreword

This document (EN ISO 21487:2023) 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of an identical text or by endorsement, at the latest by September 2023, and conflicting national standards shall be withdrawn at the latest by March 2024.

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 21487:2018.

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, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 21487:2022 has been approved by CEN as EN ISO 21487:2023 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 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. - Fuel Tanks	4,5,6,7	This standard specifies the requirements for the design and testing of petrol and diesel fuel tank only, it does provide technical requirements for: — Construction of fuel tanks; — Installation of fuel lines and hoses; — Ventilation of petrol fuel tank spaces.; — Separation of petrol fuel tanks from living quarters.
Annex II – Components of water-craft (4) - Fuel tanks intended for fixed installations and fuel hoses.	4,5,6,7	In respect to fuel tanks supplied as components only

Table ZA.2 — Applicable Standards to confer presumption of conformity as described in this Annex ZA

Column 1 Reference in Clause 2	Column 2 International Standard Edition	Column 3 Title	Column 4 Corresponding European Standard Edition
ISO 10088:2013	ISO 10088:2013	Small craft — Permanently installed fuel systems	EN ISO 10088:2017
ISO 12215-5:2019	ISO 12215-5:2019	Small craft — Hull construction and scantlings — Part 5: Design pressures for monohulls, design stresses, scantlings determination	EN ISO 12215-5:2019
ISO 12215-6:2008	ISO 12215-6:2008	Small craft — Hull construction and scantlings — Part 6: Structural arrangements and details	EN ISO 12215-6:2018

The documents listed in the Column 1 of Table ZA.2, in whole or in part, are normatively referenced in this document, i.e. are indispensable for its application. The achievement of the presumption of conformity is subject to the application of the edition of Standards as listed in Column 4 or, if no European Standard Edition exists, the International Standard Edition given in Column 2 of Table ZA.2.

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 third edition cancels and replaces the second edition (ISO 21487:2012), which has been technically revised. It also incorporates the Amendments ISO 21487:2012/Amd 1:2014 and ISO 21487:2012/Amd 2:2015.

The main changes are as follows:

— an Introduction has been added to explain the addition of Annex A;

— the Scope has been amended to include installation of fuel tanks;

— some definitions have been updated;

— Clause 4 has been updated, in particular 4.2, 4.3.9 and 4.4.1;

— sublause 5.2 has been updated and Table 2 has been introduced for tests;

— subclause 6.2 has been redrafted;

— Clause 7 has been revised;

— Annex A has been added, which provides a permeation test to determine the evaporative emissions from non-metallic tanks.

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.

Introduction

This document provides requirements for the design, installation and testing of permanently installed fuel tanks for small craft.

Some countries have environmental controls for evaporative emissions from petrol fuel systems. Annex A describes the limits and test procedures for the control of evaporative emissions from permanently installed petrol fuel tanks. The details in Annex A allow for future standardization and application of evaporative emissions on small craft.

As the international community further restricts fuel system emissions, it is anticipated that Annex A will have increased global acceptance.

Small craft — Permanently installed petrol and diesel fuel tanks

1 Scope

This document specifies requirements for the design, installation and testing of petrol and diesel fuel tanks for internal combustion engines, that are intended to be permanently installed in small 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 10088:2022, *Small craft — Permanently installed fuel systems*

ISO 12215-5:2019, *Small craft — Hull construction and scantlings — Part 5: Design pressures for monohulls, design stresses, scantlings determination*

ISO 12215-6:2008, *Small craft — Hull construction and scantlings — Part 6: Structural arrangements and details*

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
petrol
hydrocarbon fuel, or blend of hydrocarbon fuel and denatured ethanol, that is liquid at atmospheric pressure and is used in *spark ignition engines* (3.3)

3.2
diesel
hydrocarbon fuel, biofuel, or blend of these, that is liquid at atmospheric pressure and is used in *compression ignition engines* (3.4)

3.3
spark ignition engine
engine in which an electrical spark is produced to ignite the fuel/air mixture

3.4
compression ignition engine
engine in which ignition is obtained by means of compressing the fuel/air mixture

3.5
permanently installed
securely fastened by bolts, brackets, screws, paint, adhesive, welding or other means, so that it cannot be unattached without the use of tools or chemicals