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Small craft - Liquefied petroleum gas (LPG) systems (ISO 10239:2014)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/15

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English Version

**Small craft - Liquefied petroleum gas (LPG) systems (ISO
10239:2014)**Petits navires - Installations alimentées en gaz de pétrole
liquéfiés (GPL) (ISO 10239:2014)Kleine Wasserfahrzeuge - Flüssiggas-Anlagen (LPG) (ISO
10239:2014)

This European Standard was approved by CEN on 13 September 2014.

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.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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Foreword

This document (EN ISO 10239:2014) 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of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by December 2015.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 supersedes EN ISO 10239:2008.

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.

For relationship with EU Directive, 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10239:2014 has been approved by CEN as EN ISO 10239:2014 without any modification.

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 Communities 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 Directive 94/25/EC as amended by Directive 2003/44/EC

Clauses/sub-clauses of this European Standard	Corresponding annexes/ Paragraphs of Directive 94/25/EC as amended by Directive 2003/44/EC	Comments
4.2	Annex IA 5.5 Gas system Gas systems for domestic use shall be 'vapour-withdrawal' type	
4, 5, 6, 7, 8, 11	Designed and installed to avoid leaks and risk of explosion	Annex D applies in respect of cooking appliances with integral LPG cartridges with a capacity of 225 g or less
4.5, 10, Annex C.3	Capable of being tested for leaks	The use of a pressure gauge in the high pressure side of the system will not detect cylinder valve 'let by' or 'creep' which, if suspected, should be tested for separately.
6.1.1, 6.2.1, 6.2.4, 6.3.1, 6.4, 6.5.8, 7.1	Materials and components shall be suitable for the specific gas used	
4.1, 5.6, 5.7, 6.1.2, 6.2.1, 6.2.3, 6.2.5, 6.4, 6.5.1, 6.5.4, 6.5.5, 6.5.7, 7.1, 7.2, 8.1	Materials and components to withstand the stresses and exposures found in the marine environment	
7.3	Flame failure device effective on all burners	
6.6	Each gas-consuming appliance must be supplied by a separate branch of the distribution system, and each appliance must be controlled by a separate closing device	

Clauses/sub-clauses of this European Standard	Corresponding annexes/ Paragraphs of Directive 94/25/EC as amended by Directive 2003/44/EC	Comments
5.2, 6.6.2, 8	Adequate ventilation to prevent hazards from leaks	
7.4, 7.6, 9, 13, Annex B	Adequate ventilation to prevent hazards from products of combustion	
4.3, 4.4, 8.1	An enclosure shall contain all gas cylinders permanently installed.	
8	<p>The enclosure containing all gas cylinders shall be:</p> <ul style="list-style-type: none"> • separated from the living quarters, • accessible only from the outside, and • ventilated to the outside so that any escaping gas drains overboard. 	
10	Gas system(s) shall be tested after installation	
6.2.2, 6.2.3, 6.5.2, 6.5.3, 7.3, 7.7, 7.9, 11, 13.6	Annex IA 5.6.1 Fire protection, general	Annex D applies in respect of cooking appliances with integral LPG cartridges with a capacity of 225 g or less
4.4, 7.5, 12, Annex C	Annex IA 2.5 Owner's manual	Annex D applies in respect of cooking appliances with integral LPG cartridges with a capacity of 225 g or less

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

Small craft — Liquefied petroleum gas (LPG) systems

*Petits navires — Installations alimentées en gaz de pétrole
liquéfiés (GPL)*





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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. www.iso.org/directives

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 188, *Small craft*.

This third edition cancels and replaces the second edition (ISO 10239:2008), which has been technically revised. The major technical changes include:

- suitable user and manufacturer checks of the LPG system tightness;
- specifying a suitable hose material;
- describing the information to be provided in the owner's manual;
- clarification on LPG powered fuel cells included or excluded from standard.

Introduction

This International Standard does not contain procedures for commissioning new LPG installations or system maintenance or upgrades. Competent persons responsible for commissioning LPG installations should use relevant national codes and procedures appropriate to the country concerned.

Small craft — Liquefied petroleum gas (LPG) systems

1 Scope

This International Standard covers the installation of permanently installed liquefied petroleum gas LPG systems and LPG burning appliances on small craft of up to 24 m length of hull.

It does not cover devices used for LPG-fuelled propulsion engines or LPG-driven generators.

This International Standard covers cooking appliances with internal LPG cartridges, with a capacity of 225 g or less (See [Annex D](#)).

It covers storage of all LPG cylinders but is not intended to regulate the technical requirements for such cylinders that are subject to national regulations

It does not contain procedures for commissioning the LPG installation.

NOTE New designs, materials and methods of assembly giving at least equivalent results can be considered to be complying with the requirements of this International Standard when approved by a relevant body.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 8434-1:2007, *Metallic tube connections for fluid power and general use — Part 1: 24 degree cone connectors*

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

ISO 9094¹⁾, *Small craft — Fire protection*

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

ISO 10240, *Small craft — Owner's manual*

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

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

EN 751-2, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 2: Non-hardening jointing compounds*

EN 751-3, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 3: Unsintered PTFE tapes*

EN 1254-2, *Copper and copper alloys - Plumbing fittings - Part 2: Fittings with compression ends for use with copper tubes*

EN 1949, *Specification for the installation of LPG systems for habitation purposes in leisure accommodation vehicles and in other road vehicles*

1) Under preparation.

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EN 14291, *Foam producing solutions for leak detection on gas installations*

EN 15266, *Stainless steel pliable corrugated tubing kits in buildings for gas with an operating pressure up to 0,5 bar*

EN 16129:2013, *Pressure regulators, automatic change-over devices, having a maximum regulated pressure of 4 bar, with a maximum capacity of 150 kg / h, associated safety devices and adaptors for butane, propane, and their mixtures*

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