



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 10239:2017

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

**I.S. EN ISO 10239:2017**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN ISO 10239:2017 is the adopted Irish version of the European Document EN ISO 10239:2017, Small craft - Liquefied petroleum gas (LPG) systems (ISO 10239:2014)

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EUROPEAN STANDARD

**EN ISO 10239**

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2017

ICS 47.080

Supersedes EN ISO 10239:2014

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 16 July 2017.

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

**EN ISO 10239:2017 (E)**

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>
<b>Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2013/53/EU .....</b>	<b>4</b>

## European foreword

The text of ISO 10239:2014 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 10239:2017.

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of an identical text or by endorsement, at the latest by February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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 10239:2014.

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 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 10239:2014 has been approved by CEN as EN ISO 10239:2017 without any modification.

## Annex ZA (informative)

### Relationship between this European Standard and the Essential Requirements of EU Directive 2013/53/EU

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 2013/53/EU.

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 Directive 2013/53/EU**

Clauses/sub-clauses of this European Standard	Essential requirements (ERs) of EU Directive 2013/53/EU	Comments
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, Annex A, Annex B, Annex D	I.A.5.5 - Gas System	<p>This standard satisfies the legal requirements of this essential requirement in respect of Liquid Petroleum Gas systems. Attention shall be paid to the limitations set out in the scope in respect of its application to propulsion engines, generators and commissioning of installations.</p> <p>An appliance shall be used for the application intended by the manufacturer and installed in accordance with the manufacturer's instructions in accordance with clause 7.1; there is no specific legal requirement for appliances to be equipped with a flame failure device effective on all burners (clause 7.3) although they may be provided by the manufacturer.</p> <p>Annex D applies in respect of cooking appliances with integral LPG cartridges with a capacity of 225 g or less.</p>



		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.
Clause 6.5, 7.7, 7.9, Annex C, Annex D	1.A.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.
Clause 12, Annex C, Annex D.9	1.A.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.

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**INTERNATIONAL  
STANDARD**

**ISO  
10239**

Third edition  
2014-12-01

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**Small craft — Liquefied petroleum gas  
(LPG) systems**

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



Reference number  
ISO 10239:2014(E)

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**ISO 10239:2014(E)**



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# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 General provisions</b> .....	<b>3</b>
<b>5 Pressure regulation device</b> .....	<b>4</b>
<b>6 LPG supply line</b> .....	<b>5</b>
6.1 General.....	5
6.2 Piping.....	5
6.3 Hoses and hose lines.....	6
6.4 Materials.....	6
6.5 Installation.....	6
6.6 Shut-off valves.....	7
<b>7 Appliances</b> .....	<b>8</b>
<b>8 Location and installation of LPG cylinders</b> .....	<b>9</b>
<b>9 Ventilation</b> .....	<b>9</b>
<b>10 LPG installation tightness tests</b> .....	<b>10</b>
<b>11 Ignition protection from electrical devices</b> .....	<b>10</b>
<b>12 Owner's manual</b> .....	<b>10</b>
<b>13 Ducts and flues for air intake and combustion product discharge</b> .....	<b>10</b>
<b>Annex A (informative) Design guidelines for pressure drop due to pipe resistance</b> .....	<b>12</b>
<b>Annex B (normative) Ventilation</b> .....	<b>13</b>
<b>Annex C (normative) Instructions to be included with the owner's manual</b> .....	<b>14</b>
<b>Annex D (normative) Cooking appliances with integral LPG cartridges with a capacity of 225 g or less</b> .....	<b>16</b>
<b>Bibliography</b> .....	<b>17</b>

## ISO 10239:2014(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. [www.iso.org/directives](http://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. [www.iso.org/patents](http://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 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 9094<sup>1)</sup>, *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*

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1) Under preparation.

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