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Standards

Irish Standard  
I.S. EN 13799:2012

# LPG equipment and accessories - Contents gauges for Liquefied Petroleum Gas (LPG) pressure vessels

## I.S. EN 13799:2012

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

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English Version

## LPG equipment and accessories - Contents gauges for Liquefied Petroleum Gas (LPG) pressure vessels

Équipements et accessoires GPL - Jauges de niveau pour  
les réservoirs de GP

Flüssiggas-Geräte und Ausrüstungsteile -  
Füllstandsanzeiger für Druckbehälter für Flüssiggas (LPG)

This European Standard was approved by CEN on 14 January 2012.

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## Foreword

This document (EN 13799:2012) has been prepared by Technical Committee CEN/TC 286 "LPG equipment and accessories", the secretariat of which is held by NSAI.

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of an identical text or by endorsement, at the latest by September 2012, and conflicting national standards shall be withdrawn at the latest by September 2012.

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 13799:2002.

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.

For the purposes of this standard, contents gauges are considered a pressure accessory in accordance with the Pressure Equipment Directive 97/23/EC in that they have a function additional to that of containing pressure. However, as they have a volume less than 0,1 l and a maximum allowable pressure (PS) of 25 bar, they are designed and manufactured in accordance with sound engineering practice of a Member State in order to ensure safe use.

This document is considered as a supporting European Standard for the Pressure Equipment Directive 97/23/EC.

This document has been submitted for reference into the RID and/or in the technical annexes of the ADR.

The major changes to this revision include:

- scope extended to include transportable equipment;
- gauge graduations and precision included;
- overfill Protection Device is deleted, now included in EN 13175;
- test requirement is included for non-metallic floats;
- torque test values have been changed;
- vacuum test and float test have been introduced;
- Annex C, production testing has been introduced;
- Annex D, vibration testing has been introduced;
- Annex E, environmental checklist has been introduced.

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

## **Introduction**

Protection of the environment is a key political issue in Europe and around the world. It is described here in its broadest sense. However, the total life cycle aspects of a product on the environment for example is what is meant. This includes expenditure of energy during all phases: mining of raw materials, fabrication, packaging, distribution, use, scrapping, recycling of materials, etc.

NOTE Annex E indicates which clauses in this European Standard address environmental issues.

Provisions have to be restricted to a general guidance. Limit values are specified in national laws. It is recommended that companies using this standard develop an environmental management policy. For guidance see ISO 14000 series.

## 1 Scope

This European Standard specifies minimum requirements for design and testing of contents gauges, which are directly connected to LPG transportable pressure vessels, LPG drums, LPG cylinders and static LPG pressure vessels above 0,5 l water capacity excluding those used for automotive containers. This European Standard does not apply to refineries or other process plants.

## 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.

EN 549:1994, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*

EN 751 -1:1996, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 1: Anaerobic jointing compounds*

EN 751-2:1996, *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 751-3:1996, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 3: Unsintered PTFE tapes*

EN 1092-1:2007, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 1: Steel flanges*

EN 1503-1:2000, *Valves — Materials for bodies, bonnets and covers — Part 1: Steels specified in European Standards*

EN 1503-2:2000, *Valves — Materials for bodies, bonnets and covers — Part 2: Steels other than those specified in European Standards*

EN 1503-3:2000, *Valves — Materials for bodies, bonnets and covers — Part 3: Cast irons specified in European Standards*

EN 1503-4:2002, *Valves — Materials for bodies, bonnets and covers — Part 4: Copper alloys specified in European Standards*

EN 1563:1997, *Founding — Spheroidal graphite cast irons*

EN 10270-3:2001, *Steel wire for mechanical springs — Part 3: Stainless spring steel wire*

EN 12165:2011, *Copper and copper alloys — Wrought and unwrought forging stock*

EN 12420:1999, *Copper and copper alloys — Forgings*

EN 13906-1:2000, *Cylindrical helical springs made from round wire and bar — Calculation and design — Part 1: Compression springs*

EN 60079-0, *Explosive atmospheres — Part 0: Equipment — General requirements*

ISO 301:2006, *Zinc alloy ingots intended for casting*

ISO 1817:2011, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*



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