

LPG tsisternide sisumõõdikud

Contents gauges for LPG tanks

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13799:2003 sisaldab Euroopa standardi EN 13799:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13799:2003 consists of the English text of the European standard EN 13799:2002.</p> <p>This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard specifies minimum requirements for design and testing of contents gauges, which are directly connected to transportable or static LPG tanks above 0,5 l water capacity excluding those used for automotive containers</p>	<p>Scope: This European Standard specifies minimum requirements for design and testing of contents gauges, which are directly connected to transportable or static LPG tanks above 0,5 l water capacity excluding those used for automotive containers</p>
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ICS 23.020.30

Võtmesõnad: gas cylinders, l, liquefied petroleum gases, liquid gas tank, liquid levels, liquid-level indicators, marking, materials, operating conditions, operation, pressure vessels, safety, safety engineering, safety requirements, specification (approval), specifications

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English version

Contents gauges for LPG tanks

Jauges de niveau pour les réservoirs de GPL

Füllstandsanzeiger für Flüssiggasbehälter

This European Standard was approved by CEN on 9 September 2002.

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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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document EN 13799:2002 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 April 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

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.

In this European Standard the annexes A, B and C are normative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies minimum requirements for design and testing of contents gauges, which are directly connected to transportable or static LPG tanks above 0,5 l water capacity excluding those used for automotive containers.

Overfill protection devices that incorporate contents gauges are also included.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

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

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

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

EN 1503-3, *Valves – Materials for bodies, bonnets and covers – Part 3: Cast Irons specified in European Standards.*

prEN 1503-4 *Valves – Materials for bodies, bonnets and covers – Part 4: Copper alloys specified in European Standards.*

EN 1563, *Founding – Spheroidal graphite cast irons.*

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

EN 12164, *Copper and copper alloys – Rod for free machining purposes.*

EN 12420, *Copper and copper alloys – Forgings.*

EN 13906 (all Parts), *Cylindrical helical springs made from round wire and bar – Calculation and design.*

EN 50014, *Electrical apparatus for potentially explosive atmospheres – General requirements.*

EN 50015, *Electrical apparatus for potentially explosive atmospheres – Oil immersion “o”.*

EN 50016, *Electrical apparatus for potentially explosive atmospheres – Pressurised apparatus “p”.*

EN 50017, *Electrical apparatus for potentially explosive atmospheres – Powder filling “q”.*

EN 50018, *Electrical apparatus for potentially explosive atmospheres – Flameproof enclosure “d”.*

EN 50019, *Electrical apparatus for potentially explosive atmospheres – Increased safety “e”.*

EN 50020, *Electrical apparatus for potentially explosive atmospheres – Intrinsic safety “i”.*

EN 50028, *Electrical apparatus for potentially explosive atmospheres – Encapsulation “m”.*

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads – Part1: Dimensions and tolerances and designation.*

ISO 301, *Zinc alloy ingots intended for casting.*

ISO 6957, *Copper alloys – Ammonia test for stress corrosion resistance.*

3 Terms and definitions

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

3.1

LPG

mixture of light hydrocarbons, gaseous under standard atmospheric conditions, which can be liquefied by increased pressure or decreased temperature. The main components are propane, propene, butane and butene isomers

3.2

contents gauge

device to indicate the liquid level or contents in a tank

NOTE This can be incorporated into an overfill protection device.

3.2.1

float gauge

device to indicate the content of a tank by means of a float on the liquid surface within the tank

3.2.2

rotary gauge

device which operates through a rotating action in order to assess the liquid level in a tank by means of temporarily venting a limited amount of LPG, whereupon the change from liquid to vapour is detected

3.2.3

fixed level gauge

device to indicate when a predetermined liquid level in a tank has been reached or surpassed

3.2.4

slip tube

device which operates through a linear action in order to assess the liquid level in a tank by means of temporarily venting a limited amount of LPG, where upon the change from liquid to vapour is detected

3.3

overfill protection device

device that automatically stops the filling of liquid into the tank when a predetermined level has been reached

3.4

external tightness

resistance to leakage through the gauge body to or from the atmosphere

3.5

internal tightness

resistance to leakage across the gauge seat or other internal sealing components when the gauge is closed