SLOVENSKI STANDARD
oSIST prEN 13799:2026

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Oprema in pribor za utekočinjeni naftni plin (UNP) - Kazalniki nivoja v posodah za UNP

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

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

Equipements pour GPL et leurs accessoires - Jauges de niveau pour les réservoirs de gaz de pétrole liquéfié (GPL)

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Ta slovenski standard je istoveten z: **prEN 13799**

ICS:

23.020.10	Nepremične posode in rezervoarji	Stationary containers and tanks

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 13799

December 2026

ICS 23.020.01

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

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European foreword

This document (prEN 13799:2026) has been prepared by Technical Committee CEN/TC 286 “Liquid gas equipment and accessories”, the secretariat of which is held by NSAI.

This document is currently submitted to the CEN Enquiry.

This document supersedes EN 13799:2022.

The main changes compared to the previous edition include:

— introduction of capacitance level measurement technology.

This document has been submitted for reference in:

— the RID [2];

— the technical annexes of the ADR [3].

NOTE These regulations take precedence over any clause of this document. It is emphasized that RID/ADR are being revised regularly at intervals of two years which might lead to temporary non-compliances with the clauses of this document.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

For the purposes of this document, contents gauges are considered a pressure accessory in accordance with the Pressure Equipment Directive 2014/68/EU [1] in that they have a function additional to that of containing pressure.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

Provisions are restricted to a general guidance. Limit values are specified in national laws. It is recommended that companies using this document develop an environmental management policy. For guidance see the ISO 14000 series [8].

Protection of the environment is a key political issue in Europe and elsewhere. For TC 286 this is covered in CEN/TS 16765 [4] *LPG equipment and accessories - Environmental considerations for CEN/TC 286 standards*, and this Technical Specification should be read in conjunction with this document. This Technical Specification provides guidance on the environmental aspects to be considered regarding equipment and accessories produced for the LPG industry and the following is addressed:

a) design;

b) manufacture;

c) packaging;

d) use and operation;

e) disposal.

In this document the unit bar is used, due to its universal use in the field of technical gases. It should, however, be noted that bar is not an SI unit, and that the corresponding SI unit for pressure is Pa (1 bar = 10^5 Pa = 10^5 N/m^2).

NOTE Pressure values given in this document are given as gauge pressure (pressure exceeding atmospheric pressure) unless otherwise stated.

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1 Scope

This document 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 document includes minimum requirements for the safe interchangeability of telemetry equipment, which is either integral in or additional to the contents gauge.

This document does not apply to refineries or other process plants.

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.

EN 549:2019+A2:2024, *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 751-3:2022+A1:2023, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water — Part 3: PTFE tapes and PTFE strings*

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EN 1092-1:2018, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 1: Steel flanges*

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EN 1563:2018, *Founding — Spheroidal graphite cast irons*

EN 1774:1997, *Zinc and zinc alloys — Alloys for foundry purposes — Ingot and liquid*

EN 1779:2026, *Non destructive testing — Leak testing — Criteria for method and technique selection*

EN 12164:2024, *Copper and copper alloys — Rod for free machining purposes*

EN 12165:2024, *Copper and copper alloys — Wrought and unwrought forging stock*

EN 12420:2024, *Copper and copper alloys — Forgings*

EN 12516-1:2014+A1:2018, *Industrial valves — Shell design strength — Part 1: Tabulation method for steel valve shells*

EN 12516-4:2014+A1:2018, *Industrial valves — Shell design strength — Part 4: Calculation method for valve shells manufactured in metallic materials other than steel*

EN 13445-2:2026, *Unfired pressure vessels — Part 2: Materials*

EN 13906-1:2013, *Cylindrical helical springs made from round wire and bar — Calculation and design — Part 1: Compression springs*

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EN IEC 60079-0:2018,[1] *Explosive atmospheres — Part 0: Equipment — General requirements (IEC 60079-0:2017)*

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

ISO 1817:2026, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 2859-1:2026, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 6957:1988, *Copper alloys — Ammonia test for stress corrosion resistance*

ANSI/ASME B1.20.1 - 2013, *Pipe Threads, General Purpose (Inch)*

3 Terms and definitions

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

ISO and IEC maintain terminological 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
LPG
low pressure gas composed of one or more light hydrocarbons which are assigned to UN 1011, UN 1075, UN 1965, UN 1969 or UN 1978 only and which consists mainly of propane, propene, butane, butane isomers, butene with traces of other hydrocarbon gases

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3.2
contents gauge
device to indicate the liquid level or contents in a pressure vessel

3.2.1
float gauge
device to indicate the content of a vessel by means of a float on the liquid surface within the vessel

3.2.2
capacitance gauge
device which assesses the liquid level in a vessel using a very low voltage capacitance probe

3.2.3
rotary gauge
device which operates through a rotating action in order to assess the liquid level in a vessel by means of temporarily venting a limited amount of LPG, whereupon the change from liquid to vapour is detected

[1] This document is impacted by EN IEC 60079-0:2018/AC:2020-02 and EN IEC 60079-0:2018/A11:2024.

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