

LPG equipment and accessories - Automotive
LPG-systems - Installation requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

**LPG equipment and accessories - Automotive LPG-systems
- Installation requirements**

Équipements pour GPL et leurs accessoires - Véhicules
à gaz de pétrole liquéfié (GPL) - Exigences
d'installation

Flüssiggas Geräte und Ausrüstungsteile - Systeme für
mit Flüssiggas (LPG) betriebene Fahrzeuge -
Einbauvorschriften

This European Standard was approved by CEN on 27 April 2022.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 12979:2022) has been prepared by Technical Committee CEN/TC 286 “Liquefied Petroleum Gas 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of an identical text or by endorsement, at the latest by December 2022, and conflicting national standards shall be withdrawn at the latest by December 2022.

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 12979:2002.

In comparison with the previous edition, the following technical modifications have been made:

- Revised definitions;
- Updated normative references;
- Addition of a new component (5.7.6 "Manual shut-off container valve").

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.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document specifies requirements for the installation of equipment for the use of Liquefied Petroleum Gas (LPG) in automotive propulsion systems.

This document calls for the use of substances and procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Protection of the environment is a key political issue in Europe and elsewhere, for CEN/TC 286 this is covered in CEN/TS 16765 [3], which should be read in conjunction with this document. The 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; and
- e) disposal.

It has been assumed in the drafting of this document that execution of its provisions is entrusted to appropriately qualified and experienced people.

1 Scope

This document specifies the requirements for the installation of automotive LPG components that comply with EN 12805 and EN 12806.

These requirements are to ensure safe operation of such components.

This document does not cover type approval of LPG motor vehicles.

NOTE Type approval requirements are covered in UN/ECE Regulations and EU legislation.

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.

ISO 630-4, *Structural steels — Part 4: Technical delivery conditions for high yield strength quenched and tempered structural steel plates and wide flats*

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread*

EN 12805, *Automotive LPG components - Containers*

EN 12806, *Automotive liquefied petroleum gas components - Other than containers*

EN 16652-2, *LPG equipment and accessories - Automotive LPG vehicles workshops - Part 2: Personnel competence and training*

EN 60529, *Degrees of protection provided by enclosures (IP Code)*

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

liquefied petroleum gas

LPG

low pressure liquefied 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

Note 1 to entry: For automotive LPG specification, see EN 589.

3.2

automotive LPG-system

assembly of components enabling a vehicle to use automotive LPG in its propulsion system

Note 1 to entry: Requirements for each components are specified in their specific annexes.