



**NSAI**  
Standards

**Irish Standard**  
**I.S. EN 12979:2022**

**Version 2.00**

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

## I.S. EN 12979:2022 V2.00

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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NSAI  
1 Swift Square  
Northwood, Santry  
Dublin 9  
D09 A0E4  
+353 1 807 3800  
standards@nsai.ie  
[NSAI.ie](https://www.nsa.ie)

Sales  
+353 1 857 6730  
[Standards.ie](https://www.nsa.ie)

Údarás um Chaighdeán Náisiúnta na hÉireann

## **National Foreword**

I.S. EN 12979:2022 V2.00 is the version of the NSAI adopted European document EN 12979:2022, *LPG equipment and accessories - Automotive LPG-systems - Installation requirements*, including any Corrections, Amendments etc. to EN 12979:2022.

This normative document by CEN/CENELEC the elaboration of which includes a public enquiry, followed by a Formal Vote of CEN/CENELEC national members and final ratification. This European Standard is published as an identical national standard and every conflicting national standard will be withdrawn. The content of a European Standard does not conflict with the content of any other EN (and HD for CENELEC).

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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.
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EUROPEAN STANDARD

EN 12979

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2022

ICS 43.060.40

Supersedes EN 12979:2002

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.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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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.

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