



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 12979:2002

ICS 43.060.40

National Standards  
Authority of Ireland  
Dublin 9  
Ireland

Tel: (01) 807 3800  
Tel (01) 807 3838

## **AUTOMOTIVE LPG-SYSTEMS - INSTALLATION REQUIREMENTS**

*This Irish Standard was  
published under the  
authority of the National  
Standards Authority of  
Ireland  
and comes into effect on  
March 8, 2002*

**NO COPYING WITHOUT NSAI  
PERMISSION EXCEPT AS  
PERMITTED BY COPYRIGHT  
LAW**

© NSAI 2002

**Price Code I**

Údarás um Chaighdeáin Náisiúnta na hÉireann



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 12979**

January 2002

ICS 43.060.40

English version

**Automotive LPG-systems - Installation requirements**

Véhicules à Gaz de Pétrole Liquéfiés (GPL) - Exigences  
d'installation

Systeme für mit Flüssiggas betriebene (LPG) Fahrzeuge -  
Einbauvorschriften

This European Standard was approved by CEN on 16 November 2001.

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 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 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.



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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

## Contents

	page
Foreword .....	3
Introduction .....	4
<b>1 Scope .....</b>	<b>4</b>
<b>2 Normative references .....</b>	<b>4</b>
<b>3 Terms and definitions .....</b>	<b>4</b>
<b>4 Symbols and abbreviated terms .....</b>	<b>7</b>
<b>5 Installation requirements .....</b>	<b>7</b>
5.1 General requirements .....	7
5.2 Connections to LPG-system .....	7
5.3 LPG identification mark for M <sub>2</sub> and M <sub>3</sub> category vehicles .....	8
5.4 Changes to the vehicle structure .....	8
5.5 Container installation .....	8
5.6 Installation of more than one container .....	9
5.7 Components on or in the container .....	9
5.7.1 General requirements .....	9
5.7.2 Remote-controlled service valve with excess flow valve on the container .....	9
5.7.3 Pressure relief valve .....	9
5.7.4 Filling unit .....	9
5.7.5 80 % stop valve .....	9
5.7.6 Level indicator .....	10
5.7.7 Gas-tight housing .....	10
5.8 Gas pipes and hoses .....	10
5.9 Gas connections between components of the LPG-system .....	10
5.10 Remote-controlled shut-off valve .....	11
5.11 Vehicle connector .....	11
5.12 Electrical installation .....	11
5.13 Fuel selection system .....	12
5.14 Pressure relief device .....	12
5.15 Installation manual .....	12
5.15.1 General .....	12
5.15.2 Contents of the installation manual .....	12
<b>6 Markings in case of retrofit installation .....</b>	<b>13</b>
<b>Annex A (informative) Definitions of vehicle categories (extract from Directive 70/156) .....</b>	<b>14</b>
A.1 International classification of vehicle categories .....	14
A.2 Load and checking conditions .....	16
<b>Annex B (normative) Container fixing requirements up to a capacity of 150 litres .....</b>	<b>19</b>
B.1 General requirements .....	19
B.2 Container frame .....	20
<b>Annex C (normative) Arrangement of approval markings .....</b>	<b>21</b>
C.1 Type approval marking .....	21
C.2 International country numbers .....	22
<b>Annex D (normative) Provisions regarding the identification for M<sub>2</sub> and M<sub>3</sub> category vehicles .....</b>	<b>23</b>
<b>Annex E (normative) Provisions regarding the identification of the service coupling .....</b>	<b>24</b>
<b>Annex F (informative) Installation of more than one container .....</b>	<b>25</b>
<b>Bibliography .....</b>	<b>26</b>

## **Foreword**

This European Standard 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 July 2002, and conflicting national standards shall be withdrawn at the latest by July 2002.

Annexes A and F are informative.

Annexes B, C, D and E 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.

## EN 12979:2002 (E)

### Introduction

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

This European Standard 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.

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

### 1 Scope

This European Standard specifies the requirements for the installation of automotive LPG components that comply with prEN 12805 and prEN 12806.

These requirements are to ensure safe operation of such components.

This standard does not cover type approval of a LPG motor vehicle.

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

### 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 589, *Automotive fuels - LPG - Requirements and test methods*.

ISO 630, *Structural steels - Plates, wide flats, bars, sections and profiles*.

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel - Part 1: Bolts, screws and studs*.

prEN 12805, *Automotive liquefied petroleum gas components - Tanks*.

prEN 12806, *Automotive liquefied petroleum gas components - Other than tanks*.

EN 60529, *Degrees of protection provided by enclosures (IP-code) (IEC 60529:1989)*.

### 3 Terms and definitions

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

#### 3.1

##### **test pressure**

pressure to which the component or an assembly of components is subjected during the test procedure

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-